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THE UNIVERSITY OF NORTH CAROLINA RECORD

Used for binding

MAY 25, 1955 NUMBER 547

THE

GENERAL CATALOGUE ISSUE

FOR

THE 161ST SESSION

1954-1955

N. C. Collection
Library
University of N. C.

ANNOUNCEMENTS FOR THE SESSION 1955-1956

SCHEDULE OF ISSUES OF

THE RECORD

FOR YEAR 1954-1955

Research in Progress

School of Library Science Catalogue

Department of Statistics Catalogue

School of Social Work Catalogue

School of Pharmacy Catalogue

Summer Session Catalogue

School of Business Administration Catalogue

School of Education Catalogue

School of Dentistry Catalogue

School of Law Catalogue

Department of Music Catalogue

School of Public Health Catalogue

School of Journalism Catalogue

Graduate School Catalogue

School of Medicine Catalogue

The General Catalogue Issue

THE UNIVERSITY OF NORTH CAROLINA RECORD
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CHAPEL HILL, N. C.
Under the Act of August 24, 1912

MAY 25, 1955 NUMBER 547

THE UNIVERSITY OF NORTH CAROLINA RECORD

THE ONE HUNDRED AND
SIXTY-FIRST SESSION

THE GENERAL CATALOGUE ISSUE

1954-1955

Announcements for the Session
1955-1956

THE UNIVERSITY OF NORTH CAROLINA PRESS
CHAPEL HILL, N. C.

1955

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CALENDAR OF EVENTS

1955-1956

FALL SEMESTER, 1955

September 8	*Thursday, 9:00 A.M.* Dormitories open.
September 8	*Thursday, 7:30 P.M.* Assembly for all entering freshmen, Memorial Hall. Freshmen orientation begins.
September 8	*Thursday, 7:30 P.M.* Assembly for all transfer students to undergraduate schools, Memorial Hall.
September 12	*Monday, 6:00 P.M.* Freshmen and transfer orientation closes.
September 12-13	*Monday-Tuesday.* Examinations for removal of conditions.
September 13-14	*Tuesday-Wednesday, 8:30 A.M.-4:30 P.M.* Registration for all new students and all former students not pre-registered. Students who have pre-registered pick up class tickets.
September 15	*Thursday, 8:00 A.M.* Classes for fall semester begin in all departments of the University. Late registration begins. Late registration fee of $5.00 for all registering during this period.
September 19	*Monday, 4:30 P.M.* Late registration closes. No registrations accepted after this date.
October 7	*Friday, 4:00 P.M.* Faculty Council meeting.
October 8	*Saturday.* Football holiday.
October 12	*Wednesday, 10:50 A.M.* UNIVERSITY DAY. Classes suspended from 10:50 A.M. until 12:00 noon.
October 28	*Friday, 4:00 P.M.* General faculty meeting.
November 4	*Friday, 4:00 P.M.* Faculty Council meeting.
November 7	*Monday, 4:30 P.M.* Progress report due in the office of the Dean of General College, Pharmacy, Nursing, and Dental Hygiene.
November 16	*Wednesday, 4:30 P.M.* Last time for withdrawing from first semester and for receiving any refund in fees.
November 23	*Wednesday, 1:00 P.M.* Instruction ends in all departments for Thanksgiving recess.
November 28	*Monday, 8:00 A.M.* Instruction resumed in all departments at end of Thanksgiving recess.
December 2	*Friday, 4:00 P.M.* Faculty Council meeting.
December 17	*Saturday, 1:00 P.M.* Instruction ends in all departments for the Christmas vacation.
January 3, 1956	*Tuesday, 8:00 A.M.* Instruction resumed in all departments at end of Christmas vacation.
January 6	*Friday, 4:00 P.M.* Faculty Council meeting.
January 18	*Wednesday, 6:00 P.M.* Classes end for fall semester.
January 19	*Thursday, 8:30 A.M.* Final examinations, fall semester, begin.
January 28	*Saturday, 6:00 P.M.* Final examinations, fall semester, end.

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SPRING SEMESTER, 1956

January 29	*Sunday, 8:30 A.M.* Dormitories open.
January 30	*Monday, 8:30 A.M.* Assembly for all entering freshmen and transfer students, Gerrard Hall.
January 31	*Tuesday, 8:30 A.M.* Registration for all new students and all former students not pre-registered. Students who have pre-registered pick up class tickets.
February 1	*Wednesday, 8:00 A.M.* Classes for spring semester begin in all departments of the University. Late registration begins. Late registration fee of $5.00 for all registering during this period.
February 3	*Friday, 4:00 P.M.* Faculty Council meeting.
February 6	*Monday, 4:30 P.M.* Late registration closes. No registrations after this date.
March 2	*Friday, 4:00 P.M.* Faculty Council meeting.
March 23	*Friday, 4:30 P.M.* Progress reports for freshmen and sophomores.
March 28	*Wednesday, 6:00 P.M.* Instruction ends for spring recess.
April 3	*Tuesday, 8:00 A.M.* Instruction resumed in all departments of the University at end of spring recess.
April 4	*Wednesday, 4:30 P.M.* Last time for withdrawing from second semester and receiving refunds in fees.
April 6	*Friday, 4:00 P.M.* Faculty Council meeting.
April 20	*Friday, 4:30 P.M.* Last day for students in residence to reserve rooms for next scholastic year.
April 27	*Friday, 4:00 P.M.* General faculty meeting.
May 4	*Friday, 4:00 P.M.* Faculty Council meeting.
May 21	*Monday, 6:00 P.M.* Classes end for spring semester.
May 22	*Tuesday, 8:30 A.M.* Final examinations, spring semester, begin.
May 31	*Thursday, 6:00 P.M.* Final examinations, spring semester, end.
June 2	*Saturday.* Commencement begins.
June 3	*Sunday, 11:00 A.M.* Commencement sermon.
June 4	*Monday, 7:00 P.M.* Graduation exercises

SUMMER SESSION, 1956

First Term

June 7	*Thursday.* Registration.
June 8	*Friday.* First day of classes.
June 9	*Saturday.* Classes will meet.
June 23	*Saturday.* Classes will meet.
July 12	*Thursday.* Last day of classes.
July 13-14	*Friday-Saturday.* Final examinations.

Second Term

July 16	*Monday.* Registration.
July 17	*Tuesday.* First day of classes.
July 28	*Saturday.* Classes will meet.
August 18	*Saturday.* Classes will meet.
August 20	*Monday.* Last day of classes.
August 21-22	*Tuesday-Wednesday.* Final examinations.

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Part One

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*Governor William B. Umstead, Chairman *ex officio*
†Governor Luther H. Hodges, Chairman *ex officio*
Arch T. Allen, Secretary
Charles F. Carroll, State Superintendent of Public Instruction, *ex officio*

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Robert Gregg Cherry, Governor, 1945-1949
W. Kerr Scott, Governor, 1949-1953

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Wilbur H. Currie, Moore
P. B. Ferebee, Cherokee
Ben E. Fountain, Edgecombe
O. Max Gardner, Jr., Cleveland
John G. H. Geitner, Catawba
H. S. Gibbs, Carteret
A. H. Harris, Pamlico
Ira Thomas Johnston, Ashe
Vernon G. James, Pasquotank
John H. Kerr, Jr., Warren
John C. Kesler, Rowan
Mark C. Lassiter, Greene
J. Spencer Love, Guilford
Willie Lee Lumpkin, Franklin
Henry Burwell Marrow, Johnston
Lennox Polk McLendon, Guilford
William Daniel Merritt, Person
J. F. Milliken, Union
Rudolph I. Mintz, New Hanover
Rosa B. Parker, Stanly
Clarence Poe, Wake
George M. Stephens, Buncombe
John Wesley Umstead, Jr., Orange

Class of April 1, 1957

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B. B. Everett, Halifax
Mrs. R. S. Ferguson, Alexander
James S. Ficklen, Pitt
Harry A. Greene, Hoke
F. D. B. Harding, Yadkin
R. L. Harris, Person
Mrs. Albert H. Lathrop, Buncombe
R. E. Little, Anson
Kemp B. Nixon, Lincoln
G. N. Noble, Jones
Thomas J. Pearsall, Nash
H. L. Riddle, Jr., Burke
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Roy Rowe, Pender
C. Wayland Spruill, Bertie
Mrs. Charles W. Stanford, Orange
John P. Stedman, Robeson
C. Lacy Tate, Columbus
H. P. Taylor, Anson
W. Frank Taylor, Wayne
Mrs. May L. Tomlinson, Guilford
F. E. Wallace, Lenoir
David Livingston Ward, Craven
James L. Woodson, Rowan

* Died November 7, 1954.
† Succeeded Governor Umstead.
‡ Died May 12, 1954.

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MRS. ED M. ANDERSON, Ashe
WILLIAM C. BARFIELD, New Hanover
KEMP D. BATTLE, Nash
F. J. BLYTHE, Mecklenburg
CHARLES A. CANNON, Cabarrus
WILLIAM G. CLARK, Edgecombe
MRS. NANCY HALL COPELAND, Hertford
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HUGH HORTON, Martin
PAUL E. JONES, Pitt
A. H. LONDON, Chatham
A. L. MONROE, Wake
JOHN J. PARKER, Mecklenburg
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BEN F. ROYAL, Carteret
B. S. ROYSTER, Granville
WILLIAM P. SAUNDERS, Moore
FRED I. SUTTON, Lenoir
SHAHANE R. TAYLOR, Guilford
HERMAN WEIL, Wayne
R. LEE WHITMIRE, Henderson
HILL YARBOROUGH, Franklin
J. ROBERT YOUNG, Harnett

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FRANK H. BROWN, JR., Jackson
VICTOR S. BRYANT, Durham
JOHN W. CLARK, Randolph
W. LUNSFORD CREW, Halifax
R. FLOYD CROUSE, Alleghany
HORTON DOUGHTON, Iredell
A. C. EDWARDS, Greene
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ROBERT M. HANES, Forsyth
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L. J. HERRING, Wilson
MRS. J. B. KITTRELL, Pitt
JOHN D. LARKINS, JR., Jones
HARVEY B. MANN, Hyde
C. KNOX MASSEY, Durham
REID A. MAYNARD, Alamance
GLENN C. PALMER, Haywood
EDWIN PATE, Scotland
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A. ALEX SHUFORD, JR., Catawba
MRS. CHARLES W. TILLETT, Mecklenburg
CARL V. VENTERS, Onslow
J. SHELTON WICKER, Lee
E. LEIGH WINSLOW, Perquimans

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§GOVERNOR LUTHER H. HODGES, *Chairman*
ARCH T. ALLEN, *Secretary*

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Class of 1958: VICTOR S. BRYANT, MRS. MAY L. TOMLINSON, MRS. ALBERT H. LATHROP
Class of 1960: CLARENCE POE, A. H. HARRIS, THOMAS J. PEARSALL
Class of 1962: JOHN W. UMSTEAD, JR., JOHN W. CLARK, W. FRANK TAYLOR

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* Died October 21, 1953.
† Died November 2, 1954.
‡ Died November 7, 1954.
§ Succeeded Governor Umstead.

OFFICERS OF ADMINISTRATION

THE UNIVERSITY OF NORTH CAROLINA
(Office at Chapel Hill)

A consolidation of the University of North Carolina at Chapel Hill, the State College of Agriculture and Engineering at Raleigh, and the Woman's College of the University of North Carolina at Greensboro.

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J. HARRIS PURKS, Ph.D., *Vice President and Provost*
WILLIAM CLYDE FRIDAY, B.S., LL.B., *Assistant to the President*

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Chancellor of the University of North Carolina at Chapel Hill

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ALMONTE CHARLES HOWELL, Ph.D., *Secretary of the Faculty*
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* Absent on leave, spring semester, 1955.
† Resigned December 31, 1954.

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President: GORDON GRAY, A.B., LL.B.
Vice-President and Finance Officer: W. D. CARMICHAEL, JR., S.B.Comm.
Vice-President and Provost: J. HARRIS PURKS, Ph.D.
Chancellor: ROBERT BURTON HOUSE, A.M., LL.D.
Business Manager: CLAUDE E. TEAGUE, A.B.
Chairman of the Faculty: D. D. CARROLL, M.A.
Secretary of the Faculty: A. C. HOWELL, Ph.D.
Chairman, College of Arts and Sciences: C. HUGH HOLMAN, Ph.D.
Dean, Graduate School: W. W. PIERSON, Ph.D.
Dean, General College: C. P. SPRUILL, A.B., B.Litt. (Oxon.)
Dean, School of Business Administration: R. J. M. HOBBS, LL.B.
Dean, School of Education: H. ARNOLD PERRY, Ed.D.
Dean, School of Journalism: N. N. LUXON, Ph.D.
Dean, School of Law: HENRY BRANDIS, JR., A.B., LL.B.
Dean, School of Library Science: LUCILE KELLING, B.L.S.
Dean, School of Social Work: ARTHUR E. FINK, Ph.D.
Dean, School of Medicine: W. R. BERRYHILL, A.B., M.D.
Dean, School of Dentistry: J. C. BRAUER, A.B., M.Sc., D.D.S.
Dean, School of Pharmacy: E. A. BRECHT, Ph.D.
Dean, School of Nursing: ELIZABETH L. KEMBLE, Ed.D.
Dean, School of Public Health: E. G. MCGAVRAN, A.B., M.D., M.P.H.
Administrator, Division of Health Affairs: HENRY T. CLARK, JR., M.D.
Chairman, Division of Humanities: GLEN HAYDON, Ph.D.
Chairman, Division of Natural Sciences: ARTHUR ROE, Ph.D.
Chairman, Division of Social Sciences: G. W. BLACKWELL, Ph.D.
Director of Admissions: LEE ROY WELLS ARMSTRONG, A.B.
Acting Director of Extension: CHARLES MILNER, A.M. in Ed.
Director of Libraries: ANDREW H. HORN, Ph.D., B.L.S.
Director of University Press: LAMBERT DAVIS, M.A.
Director of Records: E. S. LANIER
Director of University Health Service: E. MCG. HEDGPETH, A.B., M.D.
Director of Summer Session: G. B. PHILLIPS, M.A.
Dean of Student Affairs: FRED H. WEAVER, M.A.

Elected Members (arranged alphabetically without regard to rank.)

Terms Expire December 31, 1955

DIVISION OF HEALTH AFFAIRS: J. W. Gallagher, W. H. Hartung, Roy L. Lindahl, Lucille Spalding.
DIVISION OF HUMANITIES: R. P. Bond, P. H. Epps, Wilton Mason.
DIVISION OF NATURAL SCIENCES: D. G. Basile, D. P. Costello, John Couch, R. L. Ingram, J. C. Morrow.
DIVISION OF SOCIAL SCIENCES: W. B. Aycock, J. R. Caldwell, F. N. Cleaveland, J. L. Godfrey, A. W. Pierpont, Walter Rabb, C. B. Robson, G. M. Woodward.

Terms Expire December 31, 1956

DIVISION OF HEALTH AFFAIRS: T. C. Butler, C. E. Flowers.
DIVISION OF HUMANITIES: F. M. Duffey, A. G. Engstrom, Jacques Hardré, G. S. Lane, W. L. Wiley.
DIVISION OF NATURAL SCIENCES: Wayne A. Bowers, Victor A. Greulach, Kerro Knox, E. C. Markham.
DIVISION OF SOCIAL SCIENCES: R. L. Bunting, F. M. Green, M. S. Heath, W. H. Plemmons, L. R. Wilson.

Terms Expire December 31, 1957

DIVISION OF HEALTH AFFAIRS: Emil T. Chanlett, W. A. Hall, Jr., Rosemary M. Kent, Clarence E. Sockwell.
DIVISION OF HUMANITIES: Raymond W. Adams, E. W. Hall, Geo. M. Harper, Geo. F. Horner, W. A. McKnight, Samuel Selden.
DIVISION OF NATURAL SCIENCES: E. A. Cameron, W. R. Mann, G. E. Nicholson, Paul E. Shearin.
DIVISION OF SOCIAL SCIENCES: Clyde C. Carter, Cecil Johnson, O. K. Cornwell, A. K. King, D. G. Monroe, E. W. Noland, G. B. Phillips, H. D. Wolf.

STANDING COMMITTEES OF THE FACULTY

*ADVISORY *(Elected).* 1955: Messrs. Haydon, Stoudemire, H. D. Wolf; 1956: Brinkhous, Couch, Lefler; 1957: Blackwell, Roe, Wells.

*ATHLETICS. 1955: Messrs. Hanft, J. B. Linker; 1956: A. W. Hobbs *(Chairman),* Sitterson, H. D. Wolf; 1957: Cornwell, Hedgpeth.

BUILDINGS AND GROUNDS. Messrs. †Baity, Clark, Cornwell, Emory, R. J. M. Hobbs *(Chairman),* J. A. Parker, Teague, Totten, Wager.

‡CATALOGUE. Messrs. Armstrong *(Chairman),* Howell, Miss Cowles.

*COMMUNICATION. 1955: Messrs. Slocum, Spearman; 1956: Cornwell, Grumman *(Chairman),* Wynn; 1957: S. H. Hobbs, Mattis.

*ENGLISH COMPOSITION. 1955: Messrs. W. Allen, Bierck, R. Hill, R. W. Linker, Morrison; 1956: Aycock, Daniel, Frazer, Friederich, Hartung, Horner *(Chairman),* Mouzon, Selden; 1957: E. M. Adams, Douglass, Gwynn, Newman, Radford, Tyree.

*ESTABLISHED LECTURES. 1955: Messrs. Bowers, Eliason; 1956: Hall, Hanft, Heath; 1957: Heard *(Chairman),* Vance.

*EXAMINATIONS AND INSTRUCTION. 1955: Mr. Suskin, Mrs. Thurstone; 1956: Messrs. Armstrong *(ex officio),* E. A. Cameron *(Chairman),* Horner; 1957: Duffey, Knox.

*EXECUTIVE *(Elected).* 1955: Messrs. Cathey, Klingberg; 1956: Barrett, McKnight; 1957: Cleaveland, Cotten.

*FACULTY WELFARE. 1955: Messrs. Andrews, Rice; 1956: Brooks, Crockford, Wadsworth; 1957: Noland *(Chairman),* Womack.

*FRATERNITIES AND SORORITIES. 1955: Messrs. MacKinney *(Chairman),* Thompson, Misses Carmichael, Herring; 1956: Messrs. †O'Neil, Shotts; 1957: Esser, Harland, J. E. King.

*HONORARY DEGREES *(Elected).* 1955: Messrs. Epps, Stoudemire; 1956: Blackwell, Lefler; 1957: Brandis, F. M. Green.

‡INSTRUCTIONAL PERSONNEL. Miss Kelling, Messrs. Blackwell, Brandis, Fink, Haydon, Holman, Luxon, H. A. Perry, Pierson, Roe, Spruill *(Chairman).*

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* Terms expire the year indicated.
† Absent on leave, 1954-1955.
‡ Members of this committee are appointed on account of their official positions and so are not subject to the regulation regarding terms of appointment.

*PLANS AND PROJECTS. 1955: Messrs. Demerath, Holman, Miss Adkins; 1956: Messrs. Couch, Engstrom, L. R. Wilson; 1957: Bierck, Horn, Wells *(Chairman).*

*RADIOISOTOPES. 1955: Messrs. Costello, E. H. Wood; 1956: Doak, A. K. King; 1957: Roe *(Chairman),* Shearin, Van Cleave.

*REGISTRATION. 1955: Messrs. Brecht, H. L. Ferguson, Jr., Horner, Jamerson, Keller, A. K. King; 1956: Hedgpeth, Holman, McGavran, Markham, Parrish, Pegg; 1957: Armstrong, Cameron, M. A. Hill, Lanier *(Chairman),* Luxon, H. A. Perry, Phillips.

*REGULATION OF STUDENT DANCES. 1955: Messrs. Marvin Allen *(Chairman),* Kattsoff; 1956: Jefferies, G. E. Shepard; 1957: Miss Carmichael, Mr. Fitz-Simons.

*RETIREMENT ARRANGEMENTS. 1955: Messrs John B. Graham, H. W. Lewis; 1956: Hayman, Schwentker, Whittinghill *(Chairman);* 1957: Gallagher, Nicholson, H. K. Russell.

*SCHOLARSHIPS, AWARDS, AND STUDENT AID. 1955: Messrs. Breckenridge, Cathey, Holsten, Mackie, J. A. Williams; 1956: Cornwell, M. A. Hill, Lanier, Terrill; 1957: Armstrong, D. D. Carroll *(Chairman),* Crockford, Cecil Johnson.

*SULLIVAN AWARD. 1955: Messrs. Hoyle, Mackie *(Chairman);* 1956: Holsten; 1957: Miss Carmichael, Mr. W. H. Peacock.

*UNIVERSITY GOVERNMENT. 1955: Messrs. A. K. King, McCall; 1956: Godfrey, Wiley; 1957: Markham *(Chairman),* Stovall.

*WAR CREDITS FOR VETERANS. 1955: Messrs. Harper; 1956: Plemmons *(Chairman);* 1957: Parrish.

* Terms expire the year indicated.

OFFICERS OF INSTRUCTION

GORDON GRAY, *President of the University of North Carolina*
A.B., 1930 (North Carolina); LL.B., 1933 (Yale); LL.D. (North Carolina; Duke; Wake Forest; Harvard)
ROBERT BURTON HOUSE, *Chancellor of the University of North Carolina at Chapel Hill*
A.B., 1916 (North Carolina); A.M., 1917 (Harvard); LL.D. (Catawba; Bowdoin)

By action of the Trustees of the University, the General Faculty includes all members of the University's teaching force above the rank of instructor and all general administrative officers of the institution. In the President and the General Faculty is vested final authority (under the Trustees) over all matters of University policy and activity. At present the legislative functions of the General Faculty are vested in the Faculty Council. Under the General Faculty the colleges and the schools have separate faculties and administrative boards, which have final authority over matters pertaining solely to such colleges or schools. In the following list are included the names of all members of the General Faculty who have not been listed under Officers of Administration and the names of all instructors. The names are arranged in alphabetical order. The date following the name indicates the year of appointment. The word clinical used in a title indicates that the individual has only part-time teaching duties in the University.

DAVID WILFRED ABSE (1952), *Associate Professor of Psychiatry*
B.Sc., 1935, M.B., 1938, B.Ch., 1938, M.D., 1948 (Wales); D.P.M., 1940 (London)
ELIE MAYNARD ADAMS (1948), *Associate Professor of Philosophy*
A.B., 1941, A.M., 1944 (Richmond); B.D., 1944 (Colgate-Rochester Divinity School); A.M., 1947, Ph.D., 1948 (Harvard)
JOSEPH EDISON ADAMS (1935), *Professor of Botany*
B.S., 1929 (Michigan); M.A., 1932 (Columbia); Ph.D., 1935 (California)
NICHOLSON BARNEY ADAMS (1924), *Professor of Spanish*
A.B., 1915, Litt.D. (Washington and Lee); M.A., 1920, Ph.D., 1922 (Columbia)
RAYMOND WILLIAM ADAMS (1920), *Professor of English*
A.B., 1920 (Beloit); A.M., 1921, Ph.D., 1928 (North Carolina)
DOROTHY C. ADKINS (1948), *Professor of Psychology*
B.S., 1931, Ph.D., 1937 (Ohio State)
*ROBERT EUGENE AGGER (1953), *Instructor in Political Science*
A.B., 1948 (Williams); LL.B., 1951 (Yale)
†SUSAN GREY AKERS (1931), *Professor of Library Science and Dean of the School of Library Science*
A.B., 1909 (Kentucky); Certificate, 1913 (Library School, Wisconsin); Ph.D., 1932 (Chicago)
EDGAR ALDEN (1949), *Instructor in Music*
B.M., 1936, M.M., 1940 (Oberlin); A.M., 1950 (North Carolina)
SYDENHAM BENONI ALEXANDER (1949), *Associate University Physician and Clinical Assistant Professor of Medicine*
A.B., 1941 (North Carolina); M.D., 1944 (Medical College of Virginia)

* Resigned August, 1954.
† Retired, August, 1954.

*JOHN VOLNEY ALLCOTT (1940), *Professor of Art*
Ph.B., 1928 (Wisconsin); M.A., 1936 (Chicago)

ERNEST MARVIN ALLEN, JR. (1940), *Associate Professor of Physical Education*
A.B., 1938, A.M., 1940 (North Carolina)

WALTER ALLEN, JR. (1945), *Professor of Latin*
A.B., 1932 (Wesleyan); Ph.D., 1936 (Yale)

CARL ELMORE ANDERSON (1940-42; 1950), *Associate Professor of Biochemistry and Nutrition*
B.S., 1935 (Connecticut); Ph.D., 1943 (North Carolina)

JOHN ANDRAKO (1949), *Assistant Professor of Pharmaceutical Chemistry*
B.S. in Phar., 1947, M.S., 1949 (Rutgers); Ph.D., 1953 (North Carolina)

†JAMES CLARENCE ANDREWS (1937), *Professor of Biochemistry and Nutrition*
B.S. in Chem., 1915 (Iowa); Ph.D., 1918 (Columbia); Prof. Hon., 1948 (San Carlos, Guatemala)

LOWELL DEWITT ASHBY (1947), *Professor of Economics*
A.B., 1936 (Hastings College); M.A., 1938 (Nebraska); Ph.D., 1948 (Wisconsin)

EDITH EUGENIA AVERITT (1927), *Geology and Geography Librarian*
A.B., 1925, A.B. in L.S., 1934 (North Carolina)

WILLIAM BRANTLEY AYCOCK (1948), *Associate Professor of Law*
B.S., 1936 (North Carolina State); A.M., 1937, J.D., 1948 (North Carolina)

HERBERT RALPH BAER (1945), *Professor of Law*
A.B., 1923 (Cornell); LL.B., 1926 (Harvard)

‡ENGLISH BAGBY (1925), *Professor of Psychology*
A.B., 1913, A.M., 1914 (Princeton); Ph.D., 1918 (Johns Hopkins)

JAMES OSLER BAILEY (1930), *Professor of English*
A.B., 1924, A.M., 1927, Ph.D., 1934 (North Carolina)

§HERMAN GLENN BAITY (1936), *Professor of Sanitary Engineering*
A.B., 1917, S.B. in C.E., 1922 (North Carolina); S.M., 1925, Sc.D., 1928 (Harvard)

CLAUDE ROWE BAKER (1950), *Professor of Crown and Bridge Prosthodontics*
D.D.S., 1935, A.B., 1937, M.S., 1939 (Minnesota)

EDGAR DEWEES BAKER (1953), *Clinical Assistant Professor of Orthodontics*
D.D.S., 1938 (Medical College of Virginia)

GEORGE BARCLAY (1952), *Head Coach of Football*
A.B., 1935 (North Carolina)

SAMUEL GILL BARNES (1953), *Assistant Professor of Physical Education and Lecturer in English*
B.S., 1936 (Oklahoma A. & M.); A.M., 1946, Ph.D., 1953 (North Carolina)

THOMAS BUCHANAN BARNETT (1952), *Assistant Professor of Medicine*
A.B., 1944 (Tennessee); M.D., 1949 (Rochester)

WILLIAM JOSEPH BARNHART (1954), *Instructor in English*
A.B., 1947, M.A., 1949 (Tennessee)

GERALD ALAN BARRETT (1947), *Associate Professor of Business Law*
A.B., 1933 (Lehigh); LL.B., 1936 (Columbia)

DOROTHY JANE BARTON (1954), *Clinical Instructor in Dental Hygiene*
R.D.H., 1943 (Pennsylvania)

ROGER EVANS BARTON (1953), *Instructor in Operative Dentistry*
D.D.S., 1945 (Pennsylvania)

DAVID GIOVANNI BASILE (1949), *Assistant Professor of Geography*
A.B., 1936 (Washington and Lee); M.A., 1939 (Columbia)

MARVIN CROSBY BASS (1953), *Assistant Football Coach*
B.S., 1943 (William and Mary)

E. EARL BAUGHMAN (1954), *Associate Professor of Psychology, Coordinator of the Clinical Psychology Training Program, and Research Associate in the Institute for Research in Social Science*
B.S., 1946, Ph.D., 1951 (University of Chicago)

‖WILLIAM L. BAUMGARTEN (1955), *Visiting Lecturer in Art*
B.S., 1904 (State College of Architecture and Engraving, Vienna); A.M., 1910 (Imperial Academy of Fine Arts, Vienna)

RICHARD L. BEARD (1952), *Associate Professor of Education*
A.B., 1936 (Findlay College); M.A., 1936 (Bowling Green); Ph.D., 1943 (Ohio State)

ALBERTA MARGARET BEAT (1953), *Assistant Professor of Dental Hygiene*
B.S., 1952 (Washington); R.D.H.

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* Absent on leave, spring semester, 1955.
† Absent on leave, January 1, 1955 to June 30, 1955.
‡Died January 14, 1955.
§ Absent on leave, 1954-1955.
‖ Spring semester, 1955.

CHARLES DALE BEERS (1918-22; 1927), *Professor of Zoology*
A.B., 1921, A.M., 1922 (North Carolina); Ph.D., 1925 (Johns Hopkins)

STEPHEN N. BELICHICK (1953), *Assistant Football Coach*
A.B., 1941, A.M., 1950 (Western Reserve)

EDWARD PERRY BENBOW, JR. (1954), *Clinical Instructor in Pediatrics*
A.B., 1937 (North Carolina); M.D., 1941 (Duke)

MICHAEL KALEN BERKUT (1947), *Assistant Professor of Biochemistry and Nutrition*
B.S., 1941 (North Carolina State); Ph.D., 1953 (North Carolina)

BARBARA HELEN BERNARD (1954), *Associate Professor in Psychiatric Nursing*
Diploma in Nursing, 1933 (College of Nursing and Health, University of Cincinnati); B.S.N. Ed., 1951, Litt.M., 1952 (Pittsburgh)

WALTER REECE BERRYHILL (1933), *Professor of Medicine and Dean of the School of Medicine*
A.B., 1921 (North Carolina); M.D., 1927 (Harvard)

CHRISTOPHER THEODORE BEVER (1954), *Associate Professor of Psychiatry*
A.B., 1940, M.D., 1943 (Harvard)

HAROLD A. BIERCK, JR. (1948), *Associate Professor of History*
B.A., 1938, M.A., 1940, Ph.D., 1944 (U.C.L.A.)

DWIGHT M. BISSELL (1954), *Professor of Public Health Administration*
A.B., 1926 (Fresno State College); M.A., 1931, M.D., 1936 (Stanford); M.P.H., 1939 (California)

GLENN FRANKLIN BITLER (1952), *Clinical Instructor in Pedodontics*
D.D.S., 1952 (Pennsylvania)

GORDON WILLIAMS BLACKWELL (1941), *Professor of Sociology and Director of the Institute for Research in Social Science*
A.B., 1932 (Furman); A.M., 1933 (North Carolina); A.M., 1937, Ph.D., 1940 (Harvard)

JAMES CYRIL DICKSON BLAINE (1938), *Professor of Transportation*
B.Comm., 1934 (Queen's University, Canada); S.M., 1939, Ph.D., 1941 (North Carolina)

GEORGE WALKER BLAIR, JR. (1953), *Clinical Instructor in Medicine*
B.S., 1944 (North Carolina); M.D., 1947 (Pennsylvania)

MARGARET BLEE (1941), *Associate Professor of Public Health Nursing*
Diploma, 1918 (St. Joseph School of Nursing, Kansas City, Mo.); R.N.; B.S., 1933 (Missouri); M.Ed., 1941 (Mills College)

THOMAS ANDREW BLUM (1953), *Instructor in Prosthodontics*
A.B., 1949 (North Carolina); D.D.S., 1953 (Washington)

CARL S. BLYTH (1949), *Assistant Professor of Physical Education*
B.S., 1947 (Lenoir Rhyne); A.M., 1948, Ph.D., 1953 (North Carolina)

RICHMOND PUGH BOND (1929), *Professor of English*
A.B., 1920 (Vanderbilt); A.M., 1923, Ph.D., 1929 (Harvard)

*RAJ CHANDRA BOSE (1948), *Professor of Statistics*
M.A., 1927, D.Litt., 1947 (University of Calcutta)

VERNON LEE BOUNDS (1950), *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*
LL.B., 1949 (Virginia)

WAYNE A. BOWERS (1947), *Associate Professor of Physics*
A.B., 1938 (Oberlin); Ph.D., 1943 (Cornell)

BERNARD H. BOYD (1950), *James A. Gray Professor of Biblical Literature*
A.B., 1932 (Presbyterian College); Th.B., 1935 (Princeton Theological Seminary); M.A., 1935 (Princeton); Th.D., 1946 (Union Theological Seminary in Virginia)

RUTH MARY BOYLES (1951), *Professor of Nursing*
B.S., 1930 (Kansas State); Diploma in Nursing, 1937 (St. Luke's, Chicago); R.N.; M.S., 1949 (Chicago)

DOROTHY NELL BRADLEY (1954), *Assistant Instructor*
B.S.N., 1952 (Western Reserve)

NANCY HOUNSHELL BRAME (1954), *Assistant Instructor*
B.S.N., 1953 (Medical College of Virginia); R.N.

HENRY PARKER BRANDIS, JR., (1940), *Professor of Law and Dean of the School of Law*
A.B., 1928 (North Carolina); LL.B., 1931 (Columbia); LL.D. (Catawba)

HARRY ROBERT BRASHEAR, JR. (1953), *Assistant Professor of Surgery (Orthopaedics)*
A.B., 1943, M.D., 1945 (California)

ALFRED THEODOR BRAUER (1941), *Professor of Mathematics*
Ph.D., 1928 (Berlin)

JOHN CHARLES BRAUER (1950), *Professor of Pedodontics and Dean of the School of Dentistry*
D.D.S., 1928, A.B., 1934, M.Sc., 1936 (Nebraska)

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* Absent on leave, spring semester, 1955.

CHARLES ANTHONY BREAM (1952), *Associate Professor of Radiology*
B.S., 1936 (Grove City College); M.D., 1940 (Temple)

EDWARD ARMOND BRECHT (1939), *Professor of Pharmacy and Dean of the School of Pharmacy*
B.S. in Phar., 1933, M.S., 1934, Ph.D., 1939 (Minnesota)

MILLARD SHERIDAN BRECKENRIDGE (1927), *Professor of Law*
Ph.B., 1917 (Chicago); LL.B., 1918 (Yale)

DAVID BRUCE BRIGHT (1953), *Instructor in Chemistry*
B.C., 1949 (Minnesota); M.S., 1950, Ph.D., 1952 (Illinois)

KENNETH MERLE BRINKHOUS (1946), *Professor of Pathology*
B.A., 1929, M.D., 1932 (Iowa)

EDITH PERRYMAN BROCKER (1949), *Visiting Instructor in Public Health Nursing*
Diploma, 1930 (Graduate Hospital, University of Pennsylvania); R.N.; B.S.P.H.N., 1944 (North Carolina); M.A., 1951 (Chicago)

*ROBERT MAURICE BRODERSON (1955), *Visiting Lecturer in Art*
A.B., 1950 (Duke); M.F.A. 1952 (State University of Iowa)

CONSTANCE BROOKS (1953), *Research Associate in Hematology and Hematologist, North Carolina Memorial Hospital*

†LEE MARSHALL BROOKS (1927), *Professor of Sociology*
A.B., 1925 (Boston); A.M., 1926, Ph.D., 1929 (North Carolina)

CARL FRASER BROWN (1950), *Professor of Education*
A.B., 1930, A.M., 1931 (South Carolina); Ph.D., 1946 (Peabody)

ROY MELTON BROWN (1935), *Professor of Public Welfare Administration, Emeritus*
A.B., 1906, A.M., 1921, Ph.D., 1929 (North Carolina)

EDWARD TANKARD BROWNE (1922), *Professor of Mathematics*
B.A., 1915, M.A., 1917 (Virginia); Ph.D., 1926 (Chicago)

ALBERT HUGHES BRYAN (1946), *Professor of Public Health Nutrition*
B.S., 1927, M.D., 1931 (Harvard)

DANIEL HOUSTON BUCHANAN (1935), *Professor of Economics, Emeritus*
Litt.B., 1909 (Sterling College); A.B., 1911 (Colorado College); A.M., 1912, Ph.D., 1931 (Harvard); D.Sc.Econ., 1928 (Keiogijuku University, Tokyo)

JAMES BELL BULLITT (1913), *Professor of Pathology, Emeritus*
B.A., 1894, M.A., 1895 (Washington and Lee); M.D., 1897 (Virginia)

L. FRANKLIN BUMGARDNER (1953), *Clinical Instructor in Periodontology and Oral Pathology*
D.D.S., 1935 (Emory)

PAUL LESLIE BUNCE (1952), *Assistant Professor of Surgery*
A.B., 1938 (Oberlin); M.D., 1942 (Chicago)

JOSEPH FREDERICK BUNNETT (1952), *Associate Professor of Chemistry*
B.A., 1942 (Reed College); Ph.D., 1945 (Rochester)

ROBERT LOGAN BUNTING (1949), *Assistant Professor of Economics*
A.M., 1948 (Chicago)

JOSEPH FREMONT BURKET (1952), *Associate Professor of Pedodontics*
B.S., 1935, D.D.S., 1935 (Kansas City-Western Dental College)

CHARLES HOYT BURNETT (1951), *Professor of Medicine*
A.B., 1934, M.D., 1937 (Colorado)

ROBERT CARTER BURNS (1953), *Colonel, United States Marine Corps; Professor of Naval Science*
A.B., 1927 (Princeton)

THOMAS C. BUTLER (1950), *Professor of Pharmacology*
A.B., 1930, M.D., 1934 (Vanderbilt)

THOMAS HUGH BYRD (1953), *Clinical Instructor in Operative Dentistry*
D.D.S., 1952 (Indiana)

WILLIAM CAREY BYRD, SR. (1954), *Lecturer in Psychiatry*
B.A., 1921 (Wake Forest); M.D., 1923 (Jefferson)

ROBERT RANDALL CADMUS (1950), *Director of the North Carolina Memorial Hospital and Professor of Hospital Administration*
A.B., 1936 (College of Wooster); M.D., 1940 (Columbia)

FRANK COLEMAN CADY (1950), *Part-time Professor of Public Health and Dental Science*
D.D.S., 1910 (Michigan); M.P.H., 1937 (Harvard)

JAMES ROY CALDWELL (1947), *Assistant Professor of Social Science*
A.B., 1931 (Davidson); A.M., 1937, Ph.D., 1950 (North Carolina)

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* Spring semester, 1955.
† Absent on leave, spring semester, 1955.

WALLACE EVERETT CALDWELL (1921), *Professor of Ancient History*
A.B., 1910 (Cornell); Ph.D., 1919 (Columbia)

RICHRD PERCIVAL CALHOON (1945), *Professor of Business Administration*
A.B., 1930, A.M., 1932 (Pittsburgh)

EDWARD ALEXANDER CAMERON (1929), *Professor of Mathematics*
A.B. in Educ., 1928, A.M., 1929, Ph.D., 1936 (North Carolina)

FRANK KENNETH CAMERON (1926), *Professor of Chemistry, Emeritus*
A.B., 1891, Ph.D., 1894 (Johns Hopkins)

*RALPH FREDERICK CAMPBELL (1952), *Clinical Instructor in Prosthodontics*
B.A., 1940 (Emory and Henry); D.D.S., 1943 (Medical College of Virginia)

GEORGE RADFORD CANNEFAX (1953), *Instructor in Experimental Medicine*
B.S., 1950 (Ouachita College)

KATHERINE KENNEDY CARMICHAEL (1946), *Dean of Women*
A.B., 1932 (Birmingham-Southern); M.A., 1939, Ph.D., 1943 (Vanderbilt)

MELBOURNE ROMAINE CARRIKER (1954), *Associate Professor of Zoology*
B.S., 1939 (Rutgers); Ph.M., 1940, Ph.D., 1943 (Wisconsin)

DUDLEY DEWITT CARROLL (1918), *Professor of Economics, Dean Emeritus of the School of Commerce and Chairman of the Faculty*
A.B., 1907 (Guilford); A.B., 1908 (Haverford); M.A., 1916 (Columbia)

CLYDE CASS CARTER (1946), *Associate Professor of Business Law and Research Associate in the Institute for Research in Social Science*
A.B., 1925 (Emory and Henry); M.A., 1928 (Vanderbilt); LL.B., 1935 (Wilmington Law School); Ph.D., 1942 (North Carolina)

ISABELLE KIRKLAND CARTER (1937), *Associate Professor of Social Work*
B.S., 1924 (Boston); M.S.S., 1925 (Smith College School of Social Work)

JOEL J. CARTER (1949), *Assistant Professor of Music*
A.B., 1935 (San Jose State College); M.A., 1947 (Stanford)

ROY E. CARTER, JR. (1954), *Associate Professor of Journalism and Research Associate in the Institute for Research in Social Science*
B.A., 1948 (Fort Hays Kansas State College); M.A., 1951 (Minnesota); Ph.D., 1954 (Stanford)

LESLIE RALPH CASEY (1949), *Assistant Professor of Physical Education*
A.B., 1946, A.M., 1949 (North Carolina)

JOHN CHARLES CASSEL (1954), *Associate Professor of Epidemiology*
B.Sc., 1941, MB. BCh., 1945 (University of Witerwatersrand); M.P.H., 1953 (North Carolina)

CORNELIUS OLIVER CATHEY (1947), *Associate Professor of History and Social Science and Adviser in the General College*
A.B., 1928, A.M., 1929 (Davidson College); Ph.D., 1948 (North Carolina)

VERNE STRUDWICK CAVINESS (1952), *Clinical Instructor in Medicine*
A.B., 1915 (Trinity College); M.D., 1921 (Jefferson)

EMIL BOGOMIR CEKADA (1952), *Clinical Instructor in Medicine*
B.S., 1923 (Washington); Sc.D., 1926, M.D., 1929 (Johns Hopkins)

HARRIE ROGERS CHAMBERLIN (1953), *Instructor in Pediatrics*
A.B., 1942, M.D., 1945 (Harvard)

JUNE ELIZABETH CHANCE (1953), *Assistant Professor of Psychology*
A.B., 1947, A.M., 1949 (Maryland); Ph.D., 1952 (Ohio)

EMIL THEODORE CHANLETT (1946), *Associate Professor of Sanitary Engineering*
B.S., 1937 (College of the City of New York); M.S.P.H., 1939 (Columbia); M.S.S.E., 1941 (North Carolina)

FRANCIS STUART CHAPIN, JR. (1949), *Professor of Planning and Research Professor in the Institute for Research in Social Science*
A.B., 1937 (Minnesota); B.Arch.C.P., 1939, M.C.P., 1940 (Massachusetts Institute of Technology)

MARVIN EDWIN CHAPIN (1952), *Professor of Oral Surgery*
D.D.S., 1938 (Chicago College of Dental Surgery, Loyola University)

JOHN LEROY CHASE (1953), *Visiting Lecturer in Political Science*
A.B., 1939, A.M., 1940 (Harvard); Ph.D., 1952 (Princeton)

MARY VIDA CHEEK (1953), *Assistant Professor of Nursing and Director of Nursing Service, North Carolina Memorial Hospital*
Diploma in Nursing, 1928, North Carolina Baptist Hospital; B.S., 1935 (Virginia); M.N., 1948 (Washington); R.N.

PHILIP MACON CHEEK (1945), *Assistant Professor of English*
A.B., 1927, A.M., 1928, Ph.D., 1931 (North Carolina)

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* Resigned June 30, 1954.

ALPHONSE F. CHESTNUT (1948), *Associate Professor in the Institute of Fisheries Research*
B.S., 1941 (William and Mary); M.S., 1943, Ph.D., 1949 (Rutgers)

SIDNEY SHAW CHIPMAN (1950), *Professor of Maternal and Child Health and Clinical Professor of Pediatrics*
B.A., 1924 (Acadia); M.D., 1928 (McGill); M.P.H., 1947 (Yale)

JOHN CHU (1953), *Research Associate in Statistics*
B.S., 1946 (University of Chekiang, China); M.A., 1948, Ph.D., 1951 (Iowa State)

HENRY TOOLE CLARK, JR., (1950), *Administrator of the Division of Health Affairs*
A.B., 1937 (North Carolina); M.D., 1944 (Rochester)

*SVEN CLAUSEN (1954), *Whitney-Fulbright Visiting Lecturer of Political Science Professor of Law, University of Copenhagen, Denmark* (1934)
Professor of Law, University of Copenhagen, Denmark (1934)

JOHN STROTHER CLAYTON (1951), *Assistant Professor of Radio, Television, and Motion Pictures*
A.B., 1949 (North Carolina)

FREDERIC NEILL CLEAVELAND (1951), *Associate Professor of Political Science and Research Associate in the Institute for Research in Social Science*
B.A., 1937, M.A., 1942 (Duke); M.A., 1950, Ph.D., 1951 (Princeton)

GORDON BAYLOR CLEVELAND (1952), *Instructor in Political Science*
B.S., 1938 (Davidson); M.S., 1947 (Alabama Polytechnic Institute)

ALBERT COATES (1923), *Professor of Law and Director of the Institute of Government*
A.B., 1918 (North Carolina); LL.B., 1923 (Harvard)

LUCIAN GRAVES COBLE (1951), *Clinical Professor of Prosthodontics*
D.D.S., 1908 (Baltimore College of Dental Surgery)

JOFFRE LANNING COE (1948), *Assistant Professor of Anthropology and Director of the Research Laboratories of Anthropology*
A.B., 1944 (North Carolina); M.A., 1948 (Michigan)

FREDERIC EDWARD COENEN (1931), *Professor of German*
A.B., 1928, A.M., 1930 (Arizona); Ph.D., 1936 (North Carolina)

OSCAR JACKSON COFFIN (1926), *Professor of Journalism*
A.B., 1909 (North Carolina)

GEORGE RALEIGH COFFMAN (1930), *Kenan Professor of English, Emeritus*
A.B., 1903 (Drake); A.M., 1909 (Harvard); Ph.D., 1913 (Chicago)

ROBERT ERVIN COKER (1922), *Kenan Professor of Zoology, Emeritus*
S.B., 1896, S.M., 1897 (North Carolina); Ph.D., 1906 (Johns Hopkins); Sc.D., 1947 (South Carolina)

OLAN VICTOR COOK (1931), *Associate Professor, Associate Librarian, and Curator of Rare Books*
A.B., 1929, A.B. in L.S., 1932 (North Carolina)

ALBERT DERWIN COOPER (1940), *Visiting Associate Professor of Public Health and Clinical Instructor in Medicine*
M.D., 1931, A.B., 1932 (George Washington)

WILLIAM MAURICE COPPRIDGE (1940), *Clinical Professor of Surgery (Urology)*
M.D., 1918 (Jefferson Medical College)

OLIVER KELLY CORNWELL (1935), *Professor of Physical Education*
A.B., 1920 (Wittenberg); M.A., 1929 (Ohio State); Ed.D. (Catawba)

WILLIAM WALTER CORT (1953), *Research Professor in Parasitology*
A.B., 1909 (Colorado College); A.M., 1911, Ph.D., 1914 (Illinois); Sc.D. (Hon.) (North Carolina; Colorado College)

DONALD PAUL COSTELLO (1935), *Kenan Professor of Zoology*
A.B., 1930 (College of the City of Detroit); Ph.D., 1934 (Pennsylvania)

LYMAN ATKINSON COTTEN (1941), *Associate Professor of English*
A.B., 1936 (North Carolina); Ph.D., 1941 (Yale)

JOHN NATHANIEL COUCH (1921), *Kenan Professor of Botany*
A.B., 1919, A.M., 1922, Ph.D., 1924 (North Carolina); Sc.D. (Catawba)

DUDLEY JOHNSTONE COWDEN (1935), *Professor of Economic Statistics*
A.B., 1919 (Grinnell); A.M., 1922 (Chicago); Ph.D., 1931 (Columbia)

PORTER COWLES (1933), *Assistant Director of the University of North Carolina Press*
A.B., 1933 (North Carolina)

HARDIN CRAIG (1943), *Professor of English, Emeritus*
A.B., 1897, Litt.D. (Centre College); A.M., 1899, Ph.D., 1901 (Princeton); F.R.S.L.

ERNEST CRAIGE (1952), *Assistant Professor of Medicine*
A.B., 1939 (North Carolina); M.D., 1943 (Harvard)

* Fall semester, 1954.

GEORGE WILLIAM CRANE (1952), *Clinical Assistant Professor of Medicine (Dermatology)*
M.D., 1945 (Northwestern)

HARRY WOLVEN CRANE (1920), *Professor of Psychology and Psychological Consultant*
A.B., 1909, A.M., 1910, Ph.D., 1913 (Michigan)

EUGENE BENSON CRAWFORD, JR. (1951), *Instructor in Hospital Administration and Associate Director, North Carolina Memorial Hospital*
S.B., 1948 (North Carolina)

HORACE DOWNS CROCKFORD (1921), *Professor of Chemistry*
B.S., 1920 (North Carolina State); S.M., 1923, Ph.D., 1926 (North Carolina)

WILLIAM JAMES CROMARTIE (1951), *Associate Professor of Bacteriology and Medicine and Director of the Bacteriological and Serological Laboratories*
M.D., 1937 (Emory)

TIHAMER ZOLTAN CSAKY (1951), *Assistant Professor of Pharmacology*
M.D., 1939 (University of Budapest, Hungary)

PAUL MAHAN CUMMINGS, JR. (1953), *Instructor in Oral Diagnosis and Treatment Planning*
B.S., 1949, D.D.S., 1953 (Pittsburgh)

EDWARD CHARLES CURNEN, JR. (1952), *Professor and Chairman of Department of Pediatrics*
A.B., 1931 (Yale); M.D., 1935 (Harvard)

THOMAS EDWIN CURTIS (1954), *Instructor in Psychiatry*
M.D., 1950 (Duke)

WILLIAM GRANT DAHLSTROM (1953), *Associate Professor of Psychology and Psychiatry and Director of Psychological Services for the North Carolina Memorial Hospital*
B.A., 1944, Ph.D., 1949 (Minnesota)

RUTH DALRYMPLE (1951), *Associate Professor of Nursing*
B.S., 1937 (Muskingum); M.N., 1940, M.S., 1952 (Western Reserve); R.N.

JOHN PERCY DALZELL (1937), *Professor of Law*
A.B., 1922, LL.B., 1924 (Minnesota)

WILLIAM JOHN DANIEL (1938), *Associate Professor of Psychology*
A.B., 1938 (Antioch College); Ph.D., 1942 (North Carolina)

JOHN FREDERICK DASHIELL (1919), *Kenan Professor of Psychology*
B.S., 1908, B.Litt., 1909, Sc.D., 1949 (Evansville College); M.S., 1910, Ph.D., 1913 (Columbia)

DAVID A. DAVIS (1952), *Professor of Surgery in Charge of Anaesthesiology*
M.D., 1941 (Vanderbilt)

HARRY ELLERBE DAVIS (1930), *Professor of Dramatic Art and Associate Director of The Carolina Playmakers*
A.B., 1927 (South Carolina); M.A., 1940 (Columbia)

LAMBERT DAVIS (1948), *Director of the University of North Carolina Press*
B.A., 1925, M.A., 1926 (Virginia)

MORRIS S. DAVIS (1952), *Assistant Professor of Astronomy*
B.A., 1946 (Brooklyn College); M.A., 1947 (Missouri); Ph.D., 1950 (Yale)

STANLEY JOSEPH DAVIS (1954), *Instructor in Chemistry*
B.S. in Sc., 1950, Ph.D., 1953 (University of London)

NICHOLAS JAY DEMERATH (1946), *Professor of Sociology and Research Professor in the Institute for Research in Social Science*
A.B., 1934 (DePauw); A.M., 1938, Ph.D., 1942 (Harvard)

WILLIAM WELLESLEY DEMERITT (1951), *Professor of Pedodontics and Assistant Dean of the School of Dentistry*
D.D.S., 1938 (Emory)

WILLIAM MORTON DEY (1909), *Kenan Professor of the Romance Languages and Literatures, Emeritus*
B.A., M.A., 1902 (Virginia); A.M., 1904, Ph.D., 1906 (Harvard); Chevalier of the Legion of Honor (France), 1949

GEORGE OSMORE DOAK (1949), *Associate Professor of Experimental Medicine*
B.S. in Chem., 1929, B.S. in Phar., 1930 (Saskatchewan); M.S., 1932, Ph.D., 1934 (Wisconsin)

JAMES TALMAGE DOBBINS (1918), *Professor of Chemistry*
A.B., 1911, A.M., 1912, Ph.D., 1914 (North Carolina)

MARGARET BAGGETT DOLAN (1950), *Associate Professor of Public Health Nursing*
Diploma, 1935 (School of Nursing, Georgetown University); R.N.; B.S.P.H.N., 1944 (North Carolina); M.A., 1953 (Columbia)

DANIEL L. DONOVAN (1954), *Instructor in Medicine*
A.B., 1945 (Holy Cross); M.D., 1947 (Loyola)
WILLIAM EDWARD DOSSELL (1954), *Instructor in Anatomy*
A.B., 1949 (Illinois College); M.S., 1950 (Marquette); Ph.D., 1954 (Johns Hopkins)
*ARCH RICHARD DOOLEY (1950), *Dean Appointive of the School of Business Administration*
A.B., 1944 (Yale); M.B.A., 1950 (Harvard)
ELISHA PEAIRS DOUGLASS (1952), *Assistant Professor of History*
A.B., 1939 (Princeton); M.S., 1941 (Columbia); Ph.D., 1949 (Yale)
FRANK MARION DUFFEY (1938), *Associate Professor of Spanish*
A.B., 1938 (Miami University); A.M., 1940, Ph.D., 1950 (North Carolina)
GORDON SHELTON DUGGER (1954), *Instructor in Surgery (Neuro-Surgery)*
A.B., 1941 (North Carolina); M.D., 1945 (Johns Hopkins)
JOHN EDWARD DYKSTRA (1940), *Professor of Industrial Management*
C.E., 1930 (Rensselaer); M.B.A., 1932, D.C.S., 1936 (Harvard)
ELEANOR BEAMER EASLEY (1953), *Clinical Instructor in Obstetrics and Gynecology*
B.A., 1928 (Idaho); M.A., 1929 (Iowa); M.D., 1934 (Duke)
MYRL LUA-FRANCES EBERT (1952), *Librarian, Division of Health Affairs*
B.S., 1943, B.S. in L.S., 1945 (Peabody); M.S., 1951 (Columbia)
STACY KNIGHT EBERT (1953), *Assistant Professor of Education*
B.A., 1939 (State Teachers College, Florence, Alabama); M.A., 1950 (Peabody)
FLOYD HARRIS EDMISTER (1922), *Professor of Chemistry, Emeritus*
B.S., 1912, Ph.D., 1918 (Syracuse); M.S., 1913 (Louisiana State)
FREDERICK LEE EDWARDS (1951), *Commander, United States Navy; Associate Professor of Naval Science*
B.S., 1939 (Wake Forest)
WILLIAM M. EDWARDS (1953), *Assistant Football Coach*
A.B., 1931 (Wittenberg)
JOHN M. EHLE, JR. (1951), *Assistant Professor of Radio, Television, and Motion Pictures*
A.B., 1949, A.M., 1953 (North Carolina)
NORMAN ELLSWORTH ELIASON (1946), *Professor of English*
A.B., 1927 (Luther College); M.A., 1931 (Iowa); Ph.D., 1936 (Johns Hopkins)
LUCILE MARSHALL ELLIOTT (1923), *Law Librarian*
B.Pd., 1912 (Woman's College, U.N.C.)
FRED WILSON ELLIS (1944) *Associate Professor of Pharmacology*
B.S., 1936 (South Carolina); M.S., 1938 (Florida); Ph.D., 1941 (Maryland); M.D., 1951 (Duke)
G. GORDON ELLIS (1949), *Associate Professor of Education*
A.B., 1937 (Iowa State Teachers College); M.A., 1940, Ph.D., 1948 (Wisconsin)
WILLIAM ANDREW ELLISON, JR. (1948), *Associate Professor and Director of the Institute of Fisheries Research*
A.B., 1923, A.M., 1924 (Trinity College)
STEPHEN ALBERT EMERY (1928), *Professor of Philosophy*
A.B., 1923, Ph.D., 1928 (Cornell)
†SAMUEL THOMAS EMORY (1933), *Professor of Geography*
A.B., 1917, A.M., 1918 (Randolph-Macon); M.A., 1921 (Columbia); Ph.D., 1939 (Chicago)
WILLIAM LOUIS ENGELS (1937), *Professor of Zoology*
B.S., 1930 (Notre Dame); Ph.D., 1937 (California)
ALFRED GARVIN ENGSTROM (1936), *Professor of French*
A.B., 1933, A.M., 1935, Ph.D., 1941 (North Carolina)
PRESTON HERSCHEL EPPS (1938), *Professor of Greek*
A.B., 1915, A.M., 1917 (North Carolina); Ph.D., 1928 (Chicago)
CHARLES PERRY ERICKSON (1931), *Director of Athletics*
S.B. in Civ. Eng'g., 1931 (North Carolina)
GEORGE HYNDMAN ESSER, JR. (1948), *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*
B.S., 1942 (Virginia Military Institute); LL.B., 1948 (Harvard)
MARION MONROE ESTES (1952), *Clinical Assistant Professor of Psychiatry*
A.B., 1939 (Emory); M.D., 1943 (Georgia)
MARVIN RATLEDGE EVANS (1952), *Associate Professor of Oral Diagnosis and Treatment Planning*
D.D.S., 1936 (Maryland)

* Beginning September, 1955.
† Absent on leave, 1954-1955.

JOHN A. EWING (1954), *Instructor in Psychiatry*
M.B., Ch.B., 1946, M.D., 1954 (Edinburgh, Scotland); D.P.M., 1950 (London)

WILLIAM EARL FAHY (1952), *Assistant Professor in the Institute of Fisheries Research*
B.S., 1946 (Cornell); Ph.D., 1951 (Rochester)

GEORGIA HICKS FAISON (1924), *Reference Librarian*
A.B., 1911 (Woman's College, U.N.C.); B.L.S., 1924 (New York State Library School)

THOMAS WOHLSEN FARMER (1952), *Professor of Neurological Medicine*
A.B., 1935, M.D., 1941 (Harvard); M.A., 1937 (Duke)

PRESTON COOKE FARRAR (1930), *Professor of Education, Emeritus*
A.B., 1891 (Washington and Jefferson); M.A., 1904 (Columbia)

RASHI FEIN (1952), *Lecturer in Economics and Research Associate in the Program Planning Section of the Division of Health Affairs*
B.A., 1948 (Johns Hopkins)

GEORGE BURTON FERGUSON (1953), *Clinical Consultant in Surgery (Otolaryngology)*
M.D., 1932 (Jefferson); M.Sc., 1936 (Pennsylvania)

JOHN HOWARD FERGUSON (1943), *Professor of Physiology*
B.A., 1921 (Capetown); B.A., 1925, M.A., 1931 (Oxford); M.D., 1928 (Harvard); L.M.S.S.A., 1931 (London); F.A.C.P., 1945

RICHARD ALEXANDER FEWELL (1952), *Clinical Instructor in Medicine*
A.B., 1943 (Princeton); M.D., 1945 (Pennsylvania)

LEONARD EARL FIELDS (1952), *Clinical Instructor in Medicine*
A.B., 1921 (North Carolina); M.D., 1929 (Pennsylvania)

ARTHUR EMIL FINK (1945), *Professor of Social Work and Dean of the School of Social Work*
A.B., 1924, A.M., 1930, Ph.D., 1936 (Pennsylvania); M.S.W., 1937 (Pennsylvania School of Social Work)

RUTH WHITE FINK (1947), *Associate Professor of Physical Education and Director of Physical Education for Women*
B.Sc., 1926, A.M., 1936 (Ohio State)

JANET JORDAN FISCHER (1952), *Instructor in Medicine*
A.B., 1944 (Vassar); M.D., 1948 (Johns Hopkins)

NEWTON DUCHAN FISCHER (1952), *Assistant Professor of Surgery*
B.S., 1942, A.B., 1943, M.D., 1945 (Texas)

FOSTER FITZ-SIMONS (1942), *Associate Professor of Dramatic Art*
A.B., 1934 (North Carolina)

RALPH GIBSON FLEMING (1946), *Clinical Instructor in Medicine*
M.D., 1936 (Pennsylvania)

WILLIAM LEROY FLEMING (1952), *Professor of Preventive Medicine*
B.A., 1925, M.S., 1927, M.D., 1932 (Vanderbilt)

CHARLES ELY FLOWERS, JR. (1952), *Associate Professor of Obstetrics and Gynecology*
B.S., 1941 (The Citadel); M.D., 1944 (Johns Hopkins)

ELEANOR ANN FORBES (1953), *Instructor in Dental Hygiene*
B.S., 1953 (Temple); R.D.H.

LORANT FORIZS (1952), *Clinical Assistant Professor of Psychiatry*
M.D., 1936 (Ferencz Jozsef University, Hungary)

JOHN NOEL FORTIN (1954), *Instructor in Psychiatry*
B.A., 1942 (Ottawa); M.A., 1944, M.D., 1950 (Montreal)

IRA FOWLER (1953), *Instructor in Anatomy*
B.S., 1942 (Louisiana Polytechnic Institute); M.S., 1949 (Louisiana State); Ph.D., 1952 (Northwestern)

CARLYLE JAMES FRAREY (1954), *Associate Professor of Library Science*
A.B., 1939 (Oberlin); B.S., 1947, M.S., 1951 (Columbia)

KEENER CHAPMAN FRAZER (1921), *Professor of Political Science*
A.B., 1920 (Wofford); A.M., 1921 (North Carolina)

LEON DAVID FREEDMAN (1949), *Assistant Professor of Experimental Medicine*
A.B., 1941, A.M., 1947, Ph.D., 1949 (Johns Hopkins)

*WERNER PAUL FRIEDERICH (1935), *Professor of German and Comparative Literature*
A.M., 1929, Ph.D., 1932 (Harvard)

ROBERT FROST (1947), *Visiting Poet in English*
M.A., 1918 (Amherst); Litt.D., 1953 (North Carolina)

GORDON SAMUEL FYFE (1954), *Assistant Professor of Marketing*
A.B., 1946 (Rochester); M.B.A., 1948 (Pennsylvania)

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* A one year leave of absence, beginning February 1, 1955.

JOHN WILFRED GALLAGHER (1952), *Professor of Periodontology and Oral Pathology and Director of Dental Hygiene*
D.M.D., 1934 (Oregon)

DANIEL GALLIK (1953), *Research Associate in the Institute for Research in Social Science*
A.B., 1950 (Syracuse)

LOFTON LEROY GARNER (1931), *Associate Professor of Mathematics*
A.B., 1925, A.M., 1927 (North Carolina)

MITCHELL BENNETT GARRETT (1927), *Professor of Modern European History, Emeritus*
A.B., 1900, A.M., 1903, LL.D. (Howard College); Ph.D., 1910 (Cornell)

OSCAR DAVID GARVIN (1944), *Visiting Associate Professor of Public Health Administration and Clinical Assistant Professor of Preventive Medicine*
M.D., 1932 (Medical College of the State of South Carolina); M.P.H., 1939 (Johns Hopkins)

JAMES REUBEN GASKIN (1950), *Assistant Professor of English and Adviser in the General College*
A.B., 1942 (Chattanooga); Ph.D., 1952 (North Carolina)

*MARY ESTHER GAULDEN (1954), *Visiting Associate Professor of Botany*
B.S., 1942 (Winthrop); M.A., 1944, Ph.D., 1948 (Virginia)

BEULAH THERESA GAUTEFALD (1954), *Assistant Professor of Pediatric Nursing*
Diploma in Nursing, 1929, R.N.; B.S., 1936, M.S., 1949 (Minnesota)

SYLVESTER PARKER GAY (1952), *Clinical Instructor in Periodontology and Oral Pathology*
D.D.S., 1926 (Atlanta-Southern Dental College)

WILLIAM MONROE GEER (1947), *Instructor in Social Science*
A.B., 1935 (The Citadel); M.A., 1936 (Emory)

CLAUDE SWANSON GEORGE, JR. (1954), *Associate Professor of Industrial Management*
B.S., 1943, M.S., 1951 (North Carolina); Ph.D., 1953 (State University of Iowa)

WESLEY CRITZ GEORGE (1912), *Professor of Histology and Embryology*
A.B., 1911, A.M., 1912, Ph.D., 1918 (North Carolina)

JOSEPH GERRITY (1953), *Captain United States Air Force; Assistant Professor of Air Science*
B.S., 1952 (Florida Southern)

J. SULLIVAN GIBSON (1947), *Associate Professor of Geography*
B.A., 1926 (Abilene Christian College); Ph.M., 1929 (Wisconsin); Ph.D., 1934 (Clark)

HUGO GIDUZ (1925), *Professor of French, Emeritus*
A.B., 1905 (Harvard); Diploma, 1923 (Grenoble); Officer d' Académie République Française, 1951

ALICE JOHNSON GIFFORD (1951), *Professor of Nursing*
B.A., 1935 (Woman's College, U.N.C.); M.N., 1938 (Yale); C.P.H.N., 1941 (Western Reserve); R.N.

FEDERICO GUILLERMO GIL (1945), *Associate Professor of Political Science*
J.D., 1938, D.Pol.Sci., 1940, D.Dip.Law, 1941 (Habana)

†ROBERT HENRY GILBERT (1953), *Clinical Instructor in Orthodontics*
D.D.S., 1946 (Tennessee)

THOMAS THOMPSON GILCHRIST, JR. (1954), *Major, United States Air Force; Assistant Professor of Air Science*
LL.B., 1947, LL.M., 1948 (Atlanta)

ROBERT EDWARD GILES (1953), *Assistant Director of the Institute of Government and Assistant Research Professor in Public Law and Government*
S.B., 1949, J.D., 1952 (North Carolina)

‡JAMES P. GILL (1943-49; 1951), *Assistant Football Coach*
B.S., 1932 (Missouri University)

§JOHN PHILIP GILLIN (1946), *Professor of Anthropology and Research Professor in the Institute for Research in Social Science*
A.B., 1927, A.M., 1930 (Wisconsin); A.M., 1931, Ph.D., 1934 (Harvard)

RUTH GILPIN (1954), *Associate Professor of Social Work*
A.B., 1930 (Wilson); M.A., 1931 (Pittsburgh); M.S.W., 1940 (Pennsylvania); Advanced Certificate, 1951 (Pennsylvania)

EMMANUEL M. GITLIN (1953), *Assistant Professor of Biblical Literature*
B.A., 1944 (Texas Christian); B.D., 1946, Ph.D., 1953 (Duke)

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* Fall semester, 1954-1955.
† Resigned May 30, 1954.
‡ Resigned June, 1954.
§ Absent on leave, 1954-1955.

JAMES LOGAN GODFREY (1936), *Professor of English History*
A.B., 1931 (Roanoke); A.M., 1933 (North Carolina); Ph.D., 1942 (Chicago)

ALLEN JOHNSTON GOING (1954), *Visiting Associate Professor of History*
A.B., 1938, A.M., 1940 (Alabama); Ph.D., 1947 (North Carolina)

ELIZABETH KATHLEEN GOLDIE-SMITH (1953), *Research Associate in Botany*
B.Sc., 1944, M.Sc., 1948 (London); Ph.D., 1953 (North Carolina)

GEORGE FRANKLIN GOOD, III (1953), *Captain, United States Marine Corps; Assistant Professor of Naval Science*
B.S., 1946 (Virginia)

CARL WILLIAM GOTTSCHALK (1953), *Instructor in Medicine*
B.S., 1942 (Roanoke College); M.D., 1945 (Virginia)

GERALDINE GOURLEY (1953), *Associate Professor of Medical Social Work*
Ph.B., 1935 (Washburn College); M.A., 1941 (Chicago)

JOHN BORDEN GRAHAM (1946), *Associate Professor of Pathology*
B.S., 1938 (Davidson); M.D., 1942 (Cornell)

WILLARD J. GRAHAM (1952), *Professor of Accounting and Director, Executive Program, School of Business Administration*
A.B., 1921, LL.D. (Tarkio College); A.M., 1924, Ph.D., 1934 (Chicago); C.P.A., 1925 (State of Illinois)

WILLIAM ALEXANDER GRAHAM (1940), *Clinical Instructor in Obstetrics and Gynecology*
A.B., 1928 (North Carolina); M.D., 1932 (Pennsylvania)

MARVIN LEROY GRANSTROM (1949), *Associate Professor of Sanitary Engineering*
B.S., 1942 (Morningside College); B.S. in Civ. Eng'g., 1943 (Iowa State); S.M., 1947 (Harvard)

ROBERT A. GRAY (1953), *First Lieutenant, United States Air Force; Assistant Professor of Air Science*
A.B., 1950 (North Carolina)

FLETCHER MELVIN GREEN (1921), *Kenan Professor of History and Research Professor in the Institute for Research in Social Science*
Ph.B., 1920 (Emory); A.M., 1922, Ph.D., 1927 (North Carolina)

JAMES ARNOLD GREEN (1950), *Assistant Professor of Anatomy*
B.A., 1941, Ph.D., 1950 (Illinois)

PHILIP PALMER GREEN, JR. (1949), *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*
A.B., 1943 (Princeton); LL.B., 1949 (Harvard)

BERNARD GEORGE GREENBERG (1949), *Professor of Biostatistics in the Institute of Statistics and the School of Public Health*
B.S., 1939 (College of the City of New York); Ph.D., 1949 (North Carolina State)

JOSEPH PHILIP GREER (1951), *Instructor in Hospital Administration and Assistant Director, North Carolina Memorial Hospital*
B.S., 1943 (Wake Forest)

VICTOR AUGUST GREULACH (1949), *Professor of Botany*
A.B., 1929 (DePauw); M.S., 1933, Ph.D., 1940 (Ohio State)

DORIS ERNELL GRIFFIN (1953), *Clinical Instructor in Dental Hygiene*
R.D.H., 1948 (Pennsylvania)

MATTHEW HILL GRIMMETT (1953), *Clinical Instructor in Pediatrics*
B.A., 1939 (Vanderbilt); M.D., 1943 (Duke)

DORIS CLARE GROSSKREUTZ (1954), *Assistant Professor of Surgery (Anesthesiology)*
B.S., 1940, M.D., 1942 (Illinois)

JUNE URIAH GUNTER (1946), *Instructor in Pathology and Director of Laboratories at Watts Hospital*
A.B., 1931 (North Carolina); M.D., 1936 (Jefferson Medical College)

*PAUL NEWMAN GUTHRIE (1946), *Professor of Economics*
A.B., 1926 (Tennessee); B.D., 1932 (Union Theological Seminary); M.A., 1932, Ph.D., 1946 (Columbia)

FRANZ GUTMANN (1939), *Lecturer in Economics Emeritus; Professor of Economics, Emeritus, University of Goettingen*
D.Ec., 1904 (Strasbourg)

JOHN MINOR GWYNN (1924), *Professor of Education*
A.B., 1918, A.M., 1927 (North Carolina); Ph.D., 1935 (Yale)

EVERETT WESLEY HALL (1952), *Kenan Professor of Philosophy*
A.B., 1923, A.M., 1925 (Lawrence); Ph.D., 1929 (Cornell)

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* Absent on leave, fall semester, 1954-1955.

WALTER ALEXIS HALL JR. (1951), *Professor of Prosthodontics*
B.S., D.D.S., 1938 (Southern California); M.S., 1951 (Michigan)

GEORGE CAVERNO HAM (1951), *Professor of Psychiatry and Consultant in Psychiatry on the Staff of the Institute for Research in Social Science*
M.D., 1937 (Pennsylvania)

JOSEPH GREGOIRE DE ROULHAC HAMILTON (1906), *Kenan Professor of History and Political Science, Emeritus, and Consultant of the Southern Historical Collection*
M.A., 1900 (University of the South); Ph.D., 1906 (Columbia); Litt.D. (University of the South; Washington and Lee)

FRANCIS CARL HAMMERNESS (1952), *Instructor in Pharmacy*
B.S., 1947, M.S., 1951 (Montana)

FRANK WILLIAM HANFT (1931), *Professor of Law*
LL.B., 1924, A.B., 1929, LL.M., 1929 (Minnesota); S.J.D., 1931 (Harvard)

ANN CATON HANSEN (1953), *Instructor in Preventive Medicine*
B.S., 1952 (Johns Hopkins)

*JACQUES HARDRÉ (1945), *Associate Professor of French*
Bacc.Sciences-Languages, 1936 (Paris); A.B., 1937 (Guilford); A.M., 1941, Ph.D., 1948 (North Carolina)

ROY ALLEN HARE (1954), *Clinical Instructor in Medicine*
B.S., 1942 (Wake Forest); M.D., 1945 (Bowman Gray)

EUGENE ALEXANDER HARGROVE (1954), *Assistant Professor of Psychiatry*
A.B., 1939, M.D., 1942 (Texas)

JAMES PENROSE HARLAND (1922-23; 1927) *Professor of Archaeology*
A.B., 1913, A.M., 1915, Ph.D., 1920 (Princeton)

GEORGE MILLS HARPER (1950), *Assistant Professor of English and Humanities Adviser in the College of Arts and Sciences*
A.B., 1940 (Culver-Stockton College); A.M., 1947 (Florida); Ph.D., 1951 (North Carolina)

FRANKLIN G. HARRIS (1954), *Clinical Instructor in Pedodontics*
B.S., 1940 (Wake Forest); D.D.S., 1943 (Medical College of Virginia)

FREDERICK HOLLADAY HARRIS (1949), *Instructor in Social Science*
A.B., 1934 (Randolph-Macon); A.M., 1943 (North Carolina)

EARL HORACE HARTSELL (1936), *Associate Professor of English*
A.B., 1924, A.M., 1935, Ph.D., 1942 (North Carolina)

WALTER H. HARTUNG (1948), *Professor of Pharmaceutical Chemistry*
A.B., 1918 (Minnesota); Ph.D., 1926 (Wisconsin)

DAVID ROLLO HAWKINS (1952), *Assistant Professor of Psychiatry*
B.A., 1945 (Amherst); M.D., 1946 (Rochester)

RUTH WARWICK HAY (1940), *Professor of Public Health Nursing*
Diploma, 1920 (Francis Payne Bolton School of Nursing, Western Reserve); R.N.; B.A., 1916 (Ohio Wesleyan); M.S., 1925 (Western Reserve)

GLEN HAYDON (1934), *Kenan Professor of Music*
A.B., 1918, A.M., 1921 (California); Ph.D., 1932 (Vienna)

DONALD BALES HAYMAN (1949), *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*
A.B., 1940 (Kansas); A.M., 1947 (North Carolina)

GEORGE ALEXANDER HEARD (1950), *Professor of Political Science and Research Professor in the Institute for Research in Social Science*
A.B., 1938 (North Carolina); M.A., 1948, Ph.D., 1951 (Columbia)

BUNN HEARN (1917), *Head Baseball Coach*

MILTON SYDNEY HEATH (1925), *Professor of Economics and Research Professor in the Institute for Research in Social Science*
A.B., 1917 (Kansas); A.M., 1924, Ph.D., 1938 (Harvard)

EDWARD MCGOWAN HEDGPETH (1934), *University Physician and Clinical Associate Professor of Medicine*
A.B., 1927 (North Carolina); M.D., 1931 (Pennsylvania); F.A.C.P., 1944

CLARENCE HEER (1927), *Kenan Professor of Economics, Emeritus*
A.B., 1914 (Rochester); Ph.D., 1926 (Columbia)

ARCHIBALD HENDERSON (1899), *Kenan Professor of Mathematics, Emeritus*
A.B., 1898, A.M., 1899, Ph.D., 1902 (North Carolina); Ph.D., 1915 (Chicago); D.C.L. (University of the South); LL.D. (Tulane; William and Mary); Litt.D. (Oglethorpe; Catawba)

JAMES RICHARD HENDRICKS (1949), *Associate Professor of Parasitology*
B.S., 1940 (Guilford College); S.M., 1948, Ph.D., 1951 (North Carolina)

CATHERINE HENLEY (1949), *Research Associate in Zoology*
A.B., 1943, Ph.D., 1949 (North Carolina); M.A., 1947 (Johns Hopkins)

* Kenan leave of absence, spring semester, 1955.

JOSEPH P. HENNESSEE (1954), *Assistant Research Professor in Public Law and Government*
A.B., 1951 (Idaho); J.D., 1954 (North Carolina)

HARRIET LAURA HERRING (1925), *Associate Professor of Sociology and Research Associate in the Institute for Research in Social Science*
A.B., 1913 (Meredith); A.M., 1918 (Radcliffe)

A. PRICE HEUSNER (1952), *Professor of Surgery in Charge of Neurological Surgery*
A.B., 1932 (Swarthmore); B.A., 1934, B.Sc., 1935 (Oxford); M.D., 1938 (Harvard)

EDWIN PEELLE HIATT (1945), *Associate Professor of Physiology*
A.B., 1933 (Wilmington College); M.A., 1934 (Haverford); Ph.D., 1940 (Maryland); M.D., 1951 (Duke)

THOMAS FELIX HICKERSON (1909), *Kenan Professor of Applied Mathematics, Emeritus*
Ph.B., 1904, A.M., 1907 (North Carolina); S.B. in Civ. Eng'g., 1909 (Massachusetts Institute of Technology)

LESTER BODINE HIGLEY (1953), *Professor of Orthodontics*
B.A., 1922, M.S., 1934 (Grinnell); D.D.S., 1926 (Iowa)

WILLIAM ERVIN HILDEBRANDT (1954), *Lieutenant (junior grade), United States Navy; Assistant Professor of Naval Science*
B.S., 1952 (Wisconsin)

JOHN BENJAMIN HILL (1952), *Assistant Professor of Pharmacology*
B.S., 1945 (Wisconsin); Ph.D., 1950, M.D., 1952 (Columbia)

MICHAEL ARENDELL HILL, JR. (1921), *Professor of Mathematics and Associate Dean of the General College*
A.B., 1920, A.M., 1922 (North Carolina)

REUBEN HILL (1949), *Professor of Sociology and Research Professor in the Institute for Research in Social Science*
B.S., 1935 (Utah State); Ph.M., 1936, Ph.D., 1938 (Wisconsin)

JOSEPH HILTON (1946), *Assistant Track Coach*
A.B., 1940, A.M., 1948 (North Carolina)

JOSEPH MARTIN HITCH (1952), *Clinical Associate Professor of Medicine (Dermatology)*
A.B., 1929 (Delaware); M.D., 1933, M.S., 1938 (Virginia)

ALLAN WILSON HOBBS (1917), *Professor of Applied Mathematics*
A.B., 1907 (Guilford College); A.B., 1908 (Haverford); Ph.D., 1917 (Johns Hopkins)

*RICHARD JUNIUS MENDENHALL HOBBS (1929), *Professor of Business Law and Dean of the School of Business Administration*
A.B., 1909 (Guilford); A.B., 1911 (Haverford); LL.B., 1914 (Columbia)

SAMUEL HUNTINGTON HOBBS, JR. (1916), *Professor of Rural Sociology and Research Professor in the Institute for Research in Social Science*
A.B., 1916, A.M., 1917 (North Carolina); Ph.D., 1929 (Wisconsin)

WASSILY HOEFFDING (1949), *Associate Professor of Statistics*
Ph.D., 1940 (Berlin)

FRANCES BURNS HOGAN (1946-50; 1953), *Instructor in Physical Education*
B.S., 1943 (Winthrop College); M.A., 1946 (Iowa)

HELEN BURGESS HOGAN (1953), *Current Affairs Librarian*
A.B., 1918 (Vassar); B.L.S., 1919 (Simmons)

†NORMAN JOSEPH HOLLY (1953), *Instructor in Prosthodontics*
Ph.B., 1935 (Boston College); D.M.D., 1953 (Tufts)

C. HUGH HOLMAN (1949), *Associate Professor of English and Chairman of the College of Arts and Sciences*
B.S., 1936, B.A., 1938 (Presbyterian College); Ph.D., 1949 (North Carolina)

URBAN TIGNER HOLMES, JR. (1925), *Kenan Professor of Romance Philology*
A.B., 1920 (Pennsylvania); A.M., 1921, Ph.D., 1923 (Harvard); Litt.D. (Washington and Lee)

‡SAMUEL M. HOLTON (1948), *Associate Professor of Education*
A.B., 1942, M.Ed., 1947 (Duke); B.S., 1943 (New York); M.A., 1947, Ph.D., 1948 (Yale)

JOHN J. HONIGMANN (1951), *Associate Professor of Anthropology and Research Associate in the Institute for Research in Social Science*
A.B., (Brooklyn College); M.A., 1943, Ph.D., 1947 (Yale)

CHARLES WRIGHT HOOKER (1949), *Professor of Anatomy*
A.B., 1930, A.M., 1932, Ph.D., 1933 (Duke)

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* For the year, 1954-1955.
† Resigned June 30, 1954.
‡ Absent on leave, 1954-1955.

MARY CUTLER HOPKINS (1952), *Library Extension Librarian*
A.B., 1928 (Western College); B.L.S., 1929 (Western Reserve)

ANDREW HARLIS HORN (1954), *Professor of Librarianship, University Librarian, and Chairman of the Library Division*
A.B., 1937; M.A., 1940; Ph.D., 1943; B.L.S., 1948 (California)

GEORGE FREDERICK HORNER (1926), *Associate Professor of English*
A.B., 1921, A.M., 1924 (Pennsylvania State); Ph.D., 1938 (North Carolina)

RUTH L. HOTCHKISS (1953), *Instructor in Clinical Nursing*
Diploma in Nursing, 1947, B.S.N.Ed., 1951 (Pennsylvania); R.N.

HAROLD HOTELLING (1946), *Professor of Statistics and Associate Director of the Institute of Statistics*
A.B., 1919, M.Sc., 1921 (University of Washington); Ph.D., 1924 (Princeton)

HENRY CHARLES HOUSE, JR. (1942), *Associate Professor of Physical Education*
A.B., 1931, A.M., 1943 (North Carolina)

ROBERT A. HOWARD (1951), *Assistant Professor of Art*
B.A., M.A., 1949 (Tulsa)

ALMONTE CHARLES HOWELL (1920), *Professor of English and Secretary of the Faculty*
A.B., 1917 (Denison); M.A., 1920 (Columbia); Ph.D., 1924 (North Carolina); Prof. Hon., 1948 (San Carlos, Guatemala)

ROGER WILLIAM HOWELL (1952), *Professor of Mental Health*
A.B., 1933, M.D., 1938 (Michigan)

KENNETH LOOK HOY (1950), *Instructor in Pharmacy*
B.S. in Phar., 1950 (Wyoming)

VINTON ASBURY HOYLE (1925), *Professor of Mathematics*
A.B., 1924, A.M., 1925 (North Carolina); Ph.D., 1930 (Princeton)

ARTHUR PALMER HUDSON (1930), *Kenan Professor of English*
B.S., 1913, M.A., 1920 (Mississippi); A.M., 1925 (Chicago); Ph.D., 1930 (North Carolina)

MARION W. HUDSON (1954), *Master Sergeant, United States Air Force; Instructor*

JACK HUGHES (1953), *Clinical Instructor in Surgery (Urology)*
A.B., 1939 (Davidson); M.D., 1934 (Duke)

DOUGLAS GEORGE HUMM (1951), *Associate Professor of Zoology*
B.S., 1939 (Yale); Ph.D., 1948 (Stanford)

CHARLES OLIVER HUMPHRIES (1952), *Clinical Instructor in Medicine*
A.B., 1941 (North Carolina); M.D., 1943 (Pennsylvania)

MAEBURN BRUCE HUNEYCUTT (1950), *Instructor in Botany*
A.B., 1946, M.A., 1949 (North Carolina)

JACOB TATE HUNT (1951), *Assistant Professor of Education*
B.A., 1938 (Maryville College); M.S., 1941 (Tennessee); Ph.D., 1950 (California)

FLOYD HUNTER (1950), *Associate Professor of Social Work*
B.A., 1939, M.A., 1941 (Chicago); Ph.D., 1951 (North Carolina)

GROVER CLEVELAND HUNTER, JR. (1952), *Professor of Oral Pathology and Periodontology*
A.B., 1936, D.D.S., 1940 (Emory); M.S., 1941 (Illinois)

MILTON HUPPERT (1950), *Instructor in Bacteriology*
B.S., 1940 (College of the City of New York)

HOWARD RUSSELL HUSE (1920), *Professor of French and Italian*
Ph.B., 1913, Ph.D., 1930 (Chicago)

JOSEPH CANDLER HUTCHINSON (1947-50; 1954), *Assistant Professor of Romance Languages*
A.B., 1940, M.A., 1941 (Emory); Ph.D., 1950 (North Carolina)

JAMES CARLTON INGRAM (1952), *Assistant Professor of Economics*
B.S., 1942 (Alabama); M.A., 1947 (Stanford); Ph.D., 1952 (Cornell)

ROY LEE INGRAM (1947), *Associate Professor of Geology and Acting Chairman, Department of Geology and Geography*
S.B. in Geol., 1941 (North Carolina); M.S. in Geol. and Phys., 1943 (Oklahoma); Ph.D., 1948 (Wisconsin)

*JOSEPH LOGAN IRVIN (1950), *Associate Professor of Biochemistry and Nutrition*
B.S., 1934 (South Carolina); Ph.D., 1938 (Pennsylvania)

RICHARD ELMER JAMERSON (1938), *Professor of Physical Education*
B.S., 1932 (Rice); M.A., 1934, Ed.D., 1949 (Teachers College, Columbia)

THOMAS E. JEFFREY (1952), *Assistant Professor of Psychology*
B.S., 1934 (Chicago)

WILLIAM SUMNER JENKINS (1930), *Professor of Political Science*
A.B., 1924, A.M., 1925, Ph.D., 1927, LL.B., 1931 (North Carolina); M.A. in Military Government, 1943 (Columbia)

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* Absent on leave, December 15, 1955 to September 15, 1956.

WILMER MITCHELL JENKINS (1951), *Assistant Professor of Education*
B.S., 1931 (Wake Forest); M.Ed., 1945 (Duke); D.Ed., 1954 (North Carolina)

CHARLES EDWIN JENNER (1950), *Associate Professor of Zoology*
A.B., 1941 (Central College); A.M., 1949, Ph.D., 1951 (Harvard)

KATHARINE JOCHER (1924), *Professor of Sociology and Assistant Director of the Institute for Research in Social Science*
A.B., 1922 (Goucher College); A.M., 1923 (Pennsylvania); Ph.D., 1929 (North Carolina)

CECIL JOHNSON (1931), *Professor of History and Associate Dean of the General College*
A.B., 1922 (Mississippi College); M.A., 1924 (Virginia); Ph.D., 1932 (Yale)

GUY BENTON JOHNSON (1924), *Professor of Sociology and Anthropology and Research Professor in the Institute for Research in Social Science*
A.B., 1921 (Baylor); A.M., 1922 (Chicago); Ph.D., 1927 (North Carolina)

WILLIAM G. JOHNSON (1954), *Instructor in Physics*
B.S., 1943 (Wake Forest); M.S., 1951 (North Carolina)

PAUL ALEXANDER JOHNSTON (1952), *Assistant Director of the Institute of Government and Assistant Research Professor in Public Law and Government*
A.B., 1950, LL.B., 1952 (North Carolina)

CLAIBORNE STRIBLING JONES (1944), *Associate Professor of Zoology and Adviser in the General College*
A.B., 1935 (Hampden-Sydney); M.A., 1940, Ph.D., 1944 (Virginia)

DAVID PURSER JONES (1953), *Assistant Professor of Medicine (Neurology)*
M.B., Ch.B., 1938, M.D., 1944 (Liverpool); M.R.C.P., 1943 (London); M.D., 1944 (Liverpool)

FLOYD BURTON JONES (1950), *Professor of Mathematics*
B.A., 1932, Ph.D., 1935 (Texas)

JOSEPH KEMPTON JONES (1952), *Clinical Instructor in Medicine*
A.B., 1944, M.D., 1946 (Duke)

KEITH W. JONES (1954), *Assistant Professor of Physics*
A.B., 1950 (Princeton); M.S., 1951, Ph.D., 1954 (Wisconsin)

ARTHUR MELVILLE JORDAN (1923), *Professor of Educational Psychology*
A.B., 1907 (Randolph-Macon); A.M., 1909 (Trinity College); Ph.D., 1919 (Columbia)

LEMUEL RUSSELL JORDAN (1954), *Instructor in Business Administration*
A.B., 1947 (Amherst); M.A., 1949 (Columbia)

ALLAN HAROLD JOSSELYN, JR. (1953), *Lieutenant, Supply Corps, United States Navy; Assistant Professor of Naval Science*
B.S., 1943 (Miami University)

KAI JURGENSEN (1944), *Associate Professor of Dramatic Art*
A.B., 1937 (Montana); A.M., 1943 (North Carolina)

GEORGE KACHERGIS (1949), *Associate Professor of Art*
B.F.A., 1946, M.F.A., 1948 (The Art Institute of Chicago)

JOSEPH ALAN KAHL (1954), *Director, United States Public Health Service Research Project, School of Nursing and Research Associate in the Institute for Research in Social Science*
A.B., 1947, A.M., 1948 (Chicago); Ph.D., 1952 (Harvard)

MARGARET ELLEN KALP (1947), *Assistant Professor of Library Science*
B.A., 1936 (New Jersey College for Women); M.A. in L.S., 1942 (Michigan)

*LOUIS OSGOOD KATTSOFF (1935), *Professor of Philosophy*
A.B., 1929, A.M., 1930, Ph.D., 1934 (Pennsylvania)

CORNELIUS TIMPSON KAYLOR (1947), *Associate Professor of Anatomy*
A.B., 1931 (Wesleyan); M.S., 1933 (Rutgers); Ph.D., 1936 (Princeton)

†HURSHELL HALTON KEENER (1953), *Assistant Director of the Institute of Government and Assistant Research Professor in Public Law and Government*
S.B., 1951, LL.B., 1953 (North Carolina)

‡ALAN KEITH-LUCAS (1950), *Associate Professor of Social Work*
B.A., 1931, M.A., 1935 (Trinity College, Cambridge); M.Sc. (Soc. Admin.), 1939 (Western Reserve)

MARY FRANCES KELLAM (1945), *Instructor in Physical Education*
B.S., 1944 (Woman's College, U.N.C.); A.M., 1948 (North Carolina)

JOHN ESTEN KELLER (1943-46; 1950), *Associate Professor of Spanish*
B.A., 1940, M.A., 1942 (Kentucky); Ph.D., 1946 (North Carolina)

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* Absent on leave, fall semester, 1954-1955.
† Absent on leave for military duty.
‡ Absent on leave, 1954-1955.

RICHARD WILLIAM KELLER (1954), *Assistant Professor of Crown and Bridge Prosthodontics*
D.D.S., 1947 (University of Detroit)

LUCILE KELLING (1932), *Professor of Library Science and Dean of the School of Library Science*
A.B., 1917 (Whitman College); B.L.S., 1921 (New York State Library School)

GILBERT LEROY KELSO (1951), *Associate Professor of Sanitation in the Department of Field Training*
B.A., 1929 (Iowa); M.P.H., 1942 (Minnesota)

ELIZABETH LOUANNA KEMBLE (1950), *Professor of Nursing and Dean of the School of Nursing*
Diploma in Nursing, 1927 (College of Nursing and Health, University of Cincinnati); R.N.; B.S., 1940 (New York University); M.A., 1943, Ed.D., 1948 (Teachers College, Columbia)

JOHN FAWCETT KENFIELD (1928), *Instructor in Physical Education*

ALPHA KATHERINE KENNY (1950), *Instructor in Public Health Records*

ROSEMARY MAY KENT (1951), *Associate Professor of Public Health Education*
A.B., 1933 (Agnes Scott); M.A., 1934 (Emory); M.P.H., 1946, Ph.D., 1949 (North Carolina)

LOUIS TODD KERMON (1952), *Clinical Instructor in Medicine*
B.S., 1941 (Wake Forest); M.D., 1950 (Jefferson Medical College)

THOMAS CLEVELAND KERNS (1952), *Consultant in Surgery (Ophthalmology)*
A.B., 1907 (North Carolina); M.D., 1944 (Cornell)

SYLVIA RUTH KIGER (1952), *Assistant Professor of Nursing*
Diploma in Nursing, 1941 (City Memorial, Winston-Salem); R.N.; B.S.N., 1949 (Woman's College, U.N.C.); M.S., 1952 (Western Reserve)

ARNOLD KIMSEY KING (1925), *Professor of Education and Associate Dean of the Graduate School*
A.B., 1925 (North Carolina); A.M., 1927, Ph.D., 1951 (Chicago)

JAMES EDWARD KING, JR. (1948), *Associate Professor of History and Social Science*
B.A., 1938 (Richmond); Ph.D., 1947 (Johns Hopkins)

CHARLES ATKINSON KIRKPATRICK (1946), *Professor of Marketing*
A.B., 1928, A.M., 1929 (Duke); D.C.S., 1933 (New York University)

DAVID KLEIMAN (1952), *Clinical Instructor in Medicine*
B.S., 1932, M.D., 1935 (Illinois)

EDWARD LANE-RETICKER (1952), *Assistant Director of the Institute of Government*
B.A., 1941, Ph.D., 1948 (U.C.L.A.)

SAMUEL BRADLEY KNIGHT (1941), *Professor of Chemistry*
B.S., 1934 (Clemson); S.M., 1937, Ph.D., 1938 (North Carolina)

KERRO KNOX (1951), *Assistant Professor of Chemistry*
B.S., 1945, Ph.D., 1950 (Yale); Ph.D., 1952 (Cambridge)

KERMIT FREDERICK KNUDTZON (1953), *Associate Professor of Public Health and Dental Science*
D.D.S., 1927 (Illinois)

WILLIAM JULIAN KOCH (1950), *Instructor in Botany*
A.B., 1947, M.A., 1950 (North Carolina)

JOHN CHARLES KOUNS (1953), *Clinical Instructor in Periodontology and Oral Pathology*
D.D.S., 1937 (Emory)

JOHN GOTTHOLD KUNSTMANN (1954), *Visiting Professor of German*
Cand.rev.min., 1916 (Concordia Theological Seminary); Ph.D., 1938 (University of Chicago)

GEORGE SHERMAN LANE (1937), *Kenan Professor of Germanic and Comparative Linguistics*
B.A., 1926, M.A., 1927 (Iowa); Ph.D., 1930 (Chicago)

MARY TURNER LANE (1954), *Instructor in Education*
A.B., 1939 (Salem); M.Ed., 1953 (North Carolina)

EDWARD LANE-RETICKER (1952), *Assistant Director of the Institute of Government and Assistant Research Professor in Public Law and Government*
A.B., 1947 (Dartmouth); LL.B., 1952 (Harvard)

ROBERT DANA LANGDELL (1951), *Instructor in Pathology*
M.D., 1948 (George Washington)

HAROLD QUENTIN LANGENDERFER (1953), *Assistant Professor of Accounting*
B.S., 1949 (Miami University); M.B.A., 1950 (Northwestern); D.B.A., 1954 (Indiana)

JOHN EDGAR LARSH, JR. (1943), *Professor of Parasitology*
A.B., 1939, M.S., 1940 (Illinois); Sc.D., 1943 (Johns Hopkins)

JOHN WAYNE LASLEY, JR. (1910), *Professor of Pure Mathematics*
A.B., 1910, A.M., 1911 (North Carolina); Ph.D., 1920 (Chicago)

HARRIETT ANN LAWLESS (1954), *Assistant Instructor*
B.S.N., 1953 (Medical College of Virginia); R.N.

F. DOUGLAS LAWRASON (1953), *Assistant Professor of Medicine and Assistant Dean of the School of Medicine*
B.A., 1941, M.B., 1944, M.A., 1944, M.D., 1945 (Minnesota)

*GERALD W. LAWTON (1955), *Assistant Professor of Sanitary Chemistry*
B.S. in Chem., 1931, M.S. in Chem., 1933 (Marquette); Ph.D. in Sanitary Chemistry, 1953 (Wisconsin)

†PEARCE H. LAYFIELD (1953), *Clinical Instructor in Periodontology and Oral Pathology*
D.D.S., 1939 (Emory)

DEBORAH CUSHING LEARY (1952), *Assistant Professor of Obstetrics and Gynecology*
A.B., 1932 (Vassar); M.D., 1936 (Yale)

STURGIS ELLENO LEAVITT (1917), *Kenan Professor of Spanish*
A.B., 1908 (Bowdoin); A.M., 1913, Ph.D., 1917 (Harvard); Litt.D. (Bowdoin; Davidson)

HUGH TALMAGE LEFLER (1935), *Professor of History*
A.B., 1921, A.M., 1922 (Trinity College); Ph.D., 1931 (Pennsylvania)

HARVEY EUGENE LEHMAN (1948), *Associate Professor of Zoology*
A.B., 1941 (Maryville College); A.M., 1944 (North Carolina); Ph.D., 1948 (Stanford)

ROBERT BENJAMIN LESSEM (1951), *Clinical Instructor in Prosthodontics*
A.B., 1937 (North Carolina); D.D.S., 1941 (Atlanta-Southern Dental College)

ELOISE R. LEWIS (1953), *Associate Professor of Surgical Nursing*
B.S., 1941 (Vanderbilt); M.S.Ed., 1951 (Pennsylvania); R.N.

HENRY WILKINS LEWIS (1946), *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*
A.B., 1937 (North Carolina); LL.B., 1940 (Harvard)

JESSICA H. LEWIS (1948), *Research Associate in Physiology*
A.B., 1938 (Goucher College); M.D., 1942 (Johns Hopkins)

RODDEY M. LIGON, JR. (1951), *Assistant Director of the Institute of Government and Assistant Research Professor in Public Law and Government*
S.B., 1949, J.D., 1951 (North Carolina)

ROY LAWRENCE LINDAHL (1952), *Assistant Professor of Pedodontics*
B.S., 1950, D.D.S., 1950 (Southern California); M.S., 1952 (Michigan)

RUTH EMELIA LINDBERG (1952), *Associate Professor of Obstetric Nursing*
Diploma in Nursing, 1922 (Swedish Covenent, Chicago); R.N.; B.S., 1936 (Northwestern); M.S.Ed., 1950 (Pennsylvania)

ROBERT BOYD LINDSAY (1947), *Associate University Physician and Clinical Instructor in Medicine*
B.S., 1936 (Davidson); M.D., 1940 (Jefferson Medical College)

JOE BURTON LINKER (1918), *Professor of Mathematics*
A B., 1918, A.M., 1920 (North Carolina); Ph.D., 1924 (Johns Hopkins)

ROBERT WHITE LINKER (1927), *Professor of Romance Languages*
A.B., 1925, A.M., 1928, Ph.D., 1933 (North Carolina)

ISAAC THOMAS LITTLETON (1951), *Assistant to the Librarian*
A.B., 1943 (North Carolina); M.A., 1950 (Tennessee); M.S. in L.S., 1951 (Illinois)

CLEMENT SEARL LOGSDON (1947), *Professor of Marketing*
B.S., 1924 (Georgetown); M.A., 1928, Ph.D., 1940 (Ohio State)

ARTHUR HILL LONDON (1937), *Clinical Professor of Pediatrics*
S.B., 1925 (North Carolina); M.D., 1927 (Pennsylvania)

LAWRENCE FOUSHEE LONDON (1952), *Research Librarian*
A.B., 1931, A.M., 1933, Ph.D., 1936 (North Carolina)

EUGENE ROBERT LONG (1949), *Associate Professor of Psychology*
A.B., 1946, A.M., 1947, Ph.D., 1950 (Virginia)

IRA C. LONG (1954), *Lecturer in Psychiatry*
B.A., 1914 (Trinity); M.D., 1923 (Maryland)

WILLIAM LUNSFORD LONG, JR. (1952), *Clinical Assistant Professor of Medicine*
A.B., 1940 (North Carolina); M.D., 1943 (Virginia)

WILLIAM ELLSWORTH LORING (1953), *Assistant Professor of Pathology*
B.S., 1943 (Bowdoin College); M.D., 1946 (Columbia)

MARY LOUISE LUCY (1952), *Circulation Librarian*
B.A., 1943 (Eastern Kentucky); B.S. in L.S., 1944 (Peabody); M.S. in L.S., 1953 (Columbia)

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* Beginning February 1, 1955.
† Resigned May 31, 1954.

HERBERT ZACHAREUS LUND (1952), *Visiting Professor of Pathology*
A.B., 1928 (Utah); M.D., 1931 (Pennsylvania)

NORVAL NEIL LUXON (1953), *Professor of Journalism and Dean of the School of Journalism*
B.S., 1923, M.A., 1931 (Ohio State); Ph.D., 1940 (U.C.L.A.)

ALBERT LYNCH (1954), *Chief Psychiatric Social Worker, Memorial Hospital*
B.A., 1940 (Chicago); M.S., 1952 (Wisconsin)

JOHN FRANKLIN LYNCH, JR. (1953), *Clinical Instructor in Pediatrics*
A.B., 1940 (North Carolina); M.D., 1944 (Jefferson)

JAMES WILEY LYNN, JR. (1954), *Clinical Instructor in Pediatrics*
M.D., 1946 (Tulane)

CLIFFORD PIERSON LYONS (1946), *Professor of English*
A.B., 1925, Litt.D. (Cornell College); Ph.D., 1932 (Johns Hopkins)

JOHN CORIDEN LYONS (1923), *Professor of Romance Languages*
B.S., 1920, M.A., 1921 (William and Mary); Ph.D., 1927 (North Carolina)

JEAN C. MCALISTER (1954), *Clinical Instructor in Pediatrics*
B.A., 1921 (Agnes Scott); M.D., 1933 (Pennsylvania)

HUGH A. MCALLISTER (1953), *Clinical Instructor in Obstetrics and Gynecology*
B.S., 1931 (Davidson); M.D., 1937 (Duke)

FREDERICK BAYS MCCALL (1926), *Professor of Law*
A.B., 1915 (North Carolina); LL.B., 1928 (Yale)

*GERALD RALEIGH MACCARTHY (1921), *Professor of Geology and Geophysics*
A.B., 1921 (Cornell); A.M., 1924, Ph.D., 1926 (North Carolina)

†HAROLD GRIER MCCURDY (1948), *Associate Professor of Psychology and Research Associate in the Institute for Research in Social Science*
A.B., 1930, Ph.D., 1938 (Duke)

EDWARD GRAFTON MCGAVRAN (1947), *Professor of Epidemiology and Dean of the School of Public Health*
A.B., 1924 (Butler); M.D., 1928 (Harvard Medical School); M.P.H., 1935 (Harvard School of Public Health)

CLARENCE HENRY MCGREGOR (1946), *Professor of Marketing*
B.S., 1925 (Kansas State Teachers College of Emporia); M.B.A., 1930 (Kansas); Ph.D., 1937 (Northwestern)

FRANK MCGUIRE (1952), *Head Basketball Coach*
B.S., 1936 (St. John's)

JOHN S. MCKEE, JR. (1954), *Lecturer in Psychiatry*
B.S., 1927 (North Carolina); M.D., 1929 (Pennsylvania)

ROBERT LAMBERT MCKEE (1946), *Associate Professor of Chemistry*
B.S., 1938 (Rice); M.A., 1940, Ph.D., 1943 (Texas)

WILLIAM JOHN MCKEE (1926), *Professor of Education in Extension Teaching*
C.E., 1909 (Cornell); M.A., 1919, Ph.D., 1930 (Columbia)

ERNEST LLOYD MACKIE (1921), *Professor of Mathematics and Dean of Student Awards and Distinctions*
A.B., 1917 (North Carolina); A.M., 1920 (Harvard); Ph.D., 1927 (Chicago)

LOREN CAREY MACKINNEY (1930), *Professor of Medieval History*
A.B., 1913 (Lawrence College); A.M., 1916 (Wisconsin); Ph.D., 1925 (Chicago)

CATHERINE FRANCES MACKINNON (1949), *Associate Professor of Public Health Nutrition*
A.B., 1924 (Montana State University); M.S., 1936 (Michigan)

WILLIAM ALBERT MCKNIGHT (1934), *Associate Professor of Spanish*
B.S., 1932 (Davidson); A.M., 1937, Ph.D., 1951 (North Carolina)

CHARLOTTE POPE MCLEOD (1950), *Assistant Professor of Experimental Medicine*
B.S., 1936 (Miami); Sc.D., 1939 (Johns Hopkins)

JOHN BLOUNT MACLEOD (1945), *Instructor in Social Science*
LL.B., 1922 (Wake Forest); A.B., 1939, A.M., 1947 (North Carolina)

MARY MARGARET MCLEOD (1953), *Clinical Instructor in Pediatrics*
B.S., 1932 (North Carolina); M.D., 1935 (Vanderbilt)

JOHN ALEXANDER MCMAHON (1948), *Assistant Director of the Institute of Govern ment and Research Professor in Public Law and Government*
A.B., 1942 (Duke); LL.B., 1948 (Harvard)

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* Absent on leave, fall semester, 1954-1955.
† Kenan leave of absence, spring semester, 1955.

*DOUGALD MACMILLAN (1919), *Kenan Professor of English*
A.B., 1918, A.M., 1920, Ph.D., 1925 (North Carolina)

JOHN SHERIDAN MAC NERNEY (1952), *Assistant Professor of Mathematics*
B.A., 1948, Ph.D., 1951 (Texas)

DANIEL ALLAN MACPHERSON (1923), *Professor of Bacteriology*
Ph.B., 1919, Sc.M., 1920 (Brown); Ph.D., 1929 (Chicago)

†SAMUEL DACE MCPHERSON, JR. (1952), *Clinical Associate Professor of Surgery (Ophthalmology)*
A.B., 1940 (North Carolina); M.D., 1943 (Johns Hopkins)

JOHN PAUL MAGGARD (1953), *Lecturer in Business Administration*
B.A., 1947 (Kentucky); M.B.A., 1949 (Alabama)

HAROLD JOSEPH MAGNUSON (1946), *Research Professor of Experimental Medicine*
A.B., 1934, M.D., 1938 (Southern California); M.P.H., 1942 (Johns Hopkins)

GEORGE PHILIP MANIRE (1950), *Associate Professor of Bacteriology*
B.S., 1940, M.S., 1941 (North Texas State Teachers College); Ph.D., 1949 (California)

JAMES HOLLOWELL MANLY, JR. (1954), *Instructor in Surgery*
B.S., 1944 (North Carolina); M.D., 1946 (Pennsylvania)

VIRGIL IVOR MANN (1950), *Assistant Professor of Geology*
B.A., 1942 (Macalester College); Ph.D., 1950 (Wisconsin)

WILLIAM ROBERT MANN (1949), *Associate Professor of Mathematics*
A.B., 1941 (Rochester); Ph.D., 1949 (California)

ISAAC HALL MANNING, JR. (1941), *Clinical Associate Professor of Medicine*
A.B., 1931 (North Carolina); M.D., 1935 (Harvard)

EDWIN CARLYLE MARKHAM (1934), *Smith Professor of Chemistry*
A.B., 1923 (Trinity College); Ph.D., 1927 (Virginia)

ALBERT VICTOR HUGO MASKET (1948), *Associate Professor of Physics*
B.S., 1935 (New York University); M.S., 1936, Ph.D., 1938 (Virginia)

WILTON MASON (1949), *Associate Professor of Music*
A.B., 1937, A.M., 1947, Ph.D., 1949 (North Carolina)

ELTA MAE MAST (1947), *Associate Professor of Public Health Education*
B.Ed., 1942 (Illinois State Normal University); M.S.P.H., 1945 (North Carolina)

NORMAN W. MATTIS (1947), *Professor of English*
A.B., 1926 (Pittsburgh); M.A., 1929 (Cornell)

CHARLES STEWART MAURICE (1954), *Lecturer in Geology*
A.B., 1926 (Princeton); M.A., 1931 (North Carolina); Ph.D., 1936 (Johns Hopkins)

WILLIAM T. MEADE (1951), *Instructor in Physical Education*
B.S., 1949 (Pennsylvania State); A.M., 1950 (North Carolina)

JOHN J. MELLINGER (1952), *Assistant Professor of Psychology*
S.B., 1949 (Chicago)

CHARLOTTE DAVIS MERRITT (1953), *Research Associate in Bacteriology and Bacteriologist, North Carolina Memorial Hospital*
A.B., 1941 (Notre Dame of Maryland)

ANN REID MERZBACHER (1954), *Instructor in Mathematics*
A.B., 1950 (Duke)

EUGEN MERZBACHER (1952), *Assistant Professor of Physics*
Licentiate Diploma, 1943 (Istanbul); A.M., 1948, Ph.D., 1950 (Harvard)

HAROLD DIEDRICH MEYER (1920), *Professor of Sociology and Research Professor in the Institute for Research in Social Science*
A.B., 1912, A.M., 1916 (Georgia); LL.D. (Florida Southern College); R.S.D. (Salem College, Salem, W. Va.); L.H.D. (Catawba)

AUGUSTUS TAYLOR MILLER, JR. (1939), *Professor of Physiology and Director of the Laboratory of Applied Physiology*
B.S., 1931, M.S., 1933 (Emory); Ph.D., 1939 (Michigan); M.D., 1953 (Duke)

CHARLES FREMONT MILNER (1937), *Associate Director and Professor of Education in Extension*
A.B., 1933 (Guilford); A.M. in Educ., 1941 (North Carolina)

MONTE GEORGE MISKA (1951), *Associate Professor of Crown and Bridge Prosthodontics*
D.D.S., 1937 (Minnesota)

ANN LOUISE MOLLESON (1953), *Assistant Professor of Nutrition*
B.S., 1944 (Tennessee); M.N.Sc., 1952 (Cornell)

DAVID GEETING MONROE (1947), *Professor of Political Science and Advisor in the General College*
LL.B., 1926 (Baldwin-Wallace College); Ph.B., 1930 (Chicago); Ph.D., 1940 (Northwestern)

* Absent on leave, 1954-1955.
† Absent on leave for military duty.

LUCY SHIELDS MORGAN (1942), *Professor of Public Health Education*
A.B., 1922, M.S., 1932 (Tennessee); M.A., 1929 (Columbia); Ph.D., 1938 (Yale)
WILLIAM GARDNER MORGAN (1937), *Associate University Physician and Clinical Instructor in Medicine*
A.B., 1927 (North Carolina); M.D., 1931 (Pennsylvania)
JOSEPH L. MORRISON (1946), *Associate Professor of Journalism*
A.B., 1940 (North Carolina)
JOHN CHARLES MORROW, III (1949), *Associate Professor of Chemistry*
S.B., 1944 (North Carolina); Ph.D., 1949 (Massachusetts Institute of Technology)
ERNST MORWITZ (1949), *Lecturer in German*
Dr. juris utriusque, 1910 (Heidelberg)
OLIN TERRELL MOUZON (1936), *Professor of Economics*
B.S. in Commerce, 1933 (Southern Methodist); Ph.D., 1940 (North Carolina)
CLYDE EDWARD MULLIS (1940), *Associate Professor of Physical Education*
A.B., 1938, A.M., 1940 (North Carolina)
JAMES WILSON MURDOCH (1954), *Lecturer in Psychiatry*
M.B., Ch.B., 1924 (Aberdeen, Scotland)
ROBERT JENNINGS MURPHY (1952), *Clinical Instructor in Pediatrics*
B.S., 1936 (Teachers College, Tennessee); M.D., 1940 (Vanderbilt)
ROBERT GORDON MURRAY (1953), *Assistant Professor of Surgery (Ophthalmology)*
B.A., 1938 (Saskatchewan); M.D., 1941 (Toronto); F.R.C.S.(C)
RICHARD ALBERT MYREN (1952), *Assistant Director of the Institute of Government and Assistant Research Professor in Public Law and Government*
B.S. in Chem., 1948 (Wisconsin); LL.B., 1952 (Harvard)
ARNOLD SAMUEL NASH (1947), *Professor of the History of Religion*
B.Sc., 1928, M.Sc., 1930, M.A., 1933 (Liverpool); M.Sc.Econ., 1937 (London); D.D., 1946 (Coe College)
ETHEL MILLER NASH (1954), *Lecturer in Sociology*
A.B., 1931 (University of Liverpool); M.A., 1949 (North Carolina)
GLORIA ELEANOR NASSIF (1954), *Research Associate in Medicine*
A.B., 1949 (Mount Holyoke)
ROBERT MELLINGER NELSON (1953), *Associate Professor of Orthodontics*
B.S., 1940, D.D.S., 1950, M.S., 1951 (Iowa)
*KENNETH NESS (1941), *Resident Artist and Professor of Art and Acting Director, Person Hall Art Gallery*
Diploma, 1932 (The Art Institute of Chicago)
WILLIAM S. NEWMAN (1945), *Associate Professor of Music*
B.S., 1933, M.A., 1935, Ph.D., 1939 (Western Reserve)
GEORGE EDWARD NICHOLSON, JR. (1948), *Associate Professor of Statistics and Research Associate in the Institute for Research in Social Science*
A.B., 1940, A.M., 1941, Ph.D., 1948 (North Carolina)
EDWARD WILLIAM NOLAND (1949), *Professor of Sociology and Research Professor in the Institute for Research in Social Science*
A.B., 1930, A.M., 1936 (West Virginia); Ph.D., 1944 (Cornell)
JOHN WILLIAM ROY NORTON (1938-40; 1948), *Visiting Associate Professor of Public Health*
A.B., 1920 (Duke); M.D., 1928 (Vanderbilt); M.P.H., 1936 (Harvard School of Public Health)
†HOWARD WASHINGTON ODUM (1919), *Kenan Professor of Sociology, Emeritus, and Research Professor in the Institute for Research in Social Science, Emeritus*
A.B., 1904 (Emory); A.M., 1906 (Mississippi); Ph.D., 1909 (Clark); Ph.D., 1910 (Columbia); LL.D. (Emory; Harvard); Litt.D. (College of the Ozarks); L.H.D. (Clark)
DANIEL ALEXANDER OKUN (1952), *Associate Professor of Sanitary Engineering*
B.S.C.E., 1937 (Cooper Union Institute of Technology); M.S., 1938 (California Institute of Technology); Sc.D., 1948 (Harvard)
MARY WILHELMINA OLIVER (1952), *Assistant Law Librarian*
A.B., 1940 (Western Maryland College); B.S. in L.S., 1943 (Drexel Institute of Technology); LL.B., 1951 (North Carolina)
WILLIAM ANDERSON OLSEN (1923), *Professor of English*
A.B., 1923 (Cornell); A.M., 1928 (North Carolina)
‡JOHN TETTEMER O'NEIL (1947), *Associate Professor of Finance*
S.B., 1934 (North Carolina); M.B.A., 1936 (Harvard); Ph.D., 1948 (Northwestern)
NELSON KNEELAND ORDWAY (1954), *Professor of Pediatrics*
M.D., 1938 (Yale)

* Spring, 1955.
† Died November 8, 1954.
‡ Absent on assigned leave, 1954-1955.

MARK TAYLOR ORR (1950), *Lieutenant Colonel, United States Air Force; Associate Professor of Air Science*
A.B., 1937 (North Carolina); Ph.D., 1954 (North Carolina)

EVERETT D. PALMATIER (1949), *Associate Professor of Physics*
B.Sc., 1938 (Manitoba); Ph.D., 1951 (Cornell)

JEFFRESS GARY PALMER (1952), *Assistant Professor of Medicine*
B.S., 1942, M.D., 1944 (Emory)

LEONARD PALUMBO, JR. (1952), *Assistant Professor of Obstetrics and Gynecology*
M.D., 1944 (Duke)

*DON H. PARKER (1952), *Visiting Lecturer in Education*
B.A., 1950, M.A., 1952 (Florida)

JOHN ALBERT PARKER (1946), *Professor of Planning and Research Professor in the Institute for Research in Social Science*
S.B., 1931, M.Arch., 1933, M.C.P., 1946 (Massachusetts Institute of Technology)

JOHN WILLIAM PARKER (1934), *Professor of Dramatic Art*
A.B. in Educ., 1930, A.M., 1935 (North Carolina)

J. ROY PARKER (1940), *Professor of Journalism, Emeritus*
A.B., 1915 (Wake Forest)

JAMES MILTON PARRISH (1949), *Assistant Professor of Economics and Assistant Dean of the School of Business Administration*
B.S., 1943, M.S., 1948 (Alabama); Ph.D., 1954 (North Carolina)

CARL NORRIS PATTERSON (1953), *Clinical Consultant in Surgery (Otolaryngology)*
B.S., 1941 (Franklin Marshall); M.D., 1944 (Maryland)

FRED GEER PATTERSON (1941), *Clinical Instructor in Medicine*
A.B., 1933 (North Carolina); M.D., 1937 (Pennsylvania)

HUBERT CLIFTON PATTERSON, JR. (1950), *Assistant Professor of Surgery*
A.B., 1936 (Duke); M.D., 1937 (Harvard)

THOMAS MCEVOY PATTERSON (1950), *Assistant Professor of Dramatic Art*
A.B., 1934, A.M., 1936 (Texas)

JAMES WELCH PATTON (1948), *Professor of History and Director of the Southern Historical Collection*
A.B., 1924 (Vanderbilt); A.M., 1925, Ph.D., 1929 (North Carolina)

JAMES C. N. PAUL (1953), *Assistant Director of the Institute of Government and Assistant Research Professor in Public Law and Government*
A.B., 1948 (Princeton); LL.B., 1952 (Pennsylvania)

ERLE EWART PEACOCK (1920), *Professor of Accounting*
A.B., 1914 (Georgia); M.B.A., 1916 (Harvard); C.P.A. (State of North Carolina)

WILLIAM HENRY PEACOCK (1946), *Associate Professor of Physical Education*
A.B., 1932 (Maryville College); A.M., 1940, Ph.D., 1945 (North Carolina)

RICHARD LEHMER PEARSE (1940), *Clinical Instructor in Obstetrics and Gynecology*
M.D., 1931 (Harvard)

CARL HAMILTON PEGG (1930), *Professor of History*
A.B. in Educ., 1927, A.M., 1927, Ph.D., 1930 (North Carolina)

GEORGE DIAL PENICK (1949), *Assistant Professor of Pathology*
S.B., 1944 (North Carolina); M.D., 1946 (Harvard)

JOSEPH H. PERLMUTT (1953), *Assistant Professor of Physiology*
B.S., 1939 (College of Charleston); A.M., 1942 (North Carolina); Ph.D., 1949 (Princeton)

H. ARNOLD PERRY (1948), *Professor of Education and Dean of the School of Education*
A.B., 1926, Ed.M., 1933 (Duke); Ed.D., 1943 (Columbia)

SOLOMON PAUL PERRY (1954), *Clinical Associate Professor of Radiology*
A.B., 1921 (Davis and Elkins College); M.D., 1926 (Chicago)

WILLIAM DECATUR PERRY (1937), *Associate Professor of Education and Director of the University Testing Service*
A.B. in Educ., 1929 (North Carolina); M.A., 1934 (Columbia); Ed.D., 1937 (Teachers College, Columbia)

ANN DEHUFF PETERS (1953), *Clinical Instructor in Pediatrics and Lecturer in Medical Information*
B.A., 1936 (New Mexico); B.S., 1937, M.S.S.W., 1938 (Simmons College); M.D., 1946 (Washington University)

RICHARD MORSE PETERS (1952), *Assistant Professor of Surgery*
B.S., 1943, M.D., 1945 (Yale)

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* Resigned June 15, 1954.

OSLER L. PETERSON (1952), *Clinical Assistant Professor of Medicine and Director of Program Planning, Division of Health Affairs*

A.B., 1934 (Gustavus Adolphus College); M.B., 1938, M.D., 1939 (Minnesota); M.P.H., 1947 (Johns Hopkins)

RALPH WILLIAM PFOUTS (1949), *Associate Professor of Economics*

A.B., 1942, A.M., 1947 (Kansas); Ph.D., 1952 (North Carolina)

PETER GEORGE PHIALAS (1953), *Assistant Professor of English*

B.A., 1938 (Northeast Missouri State Teachers College); M.A., 1939 (Missouri); Ph.D., 1948 (Yale)

CLARENCE EDWARD PHILBROOK (1947), *Associate Professor of Economics*

A.B., 1936, Ph.D., 1949 (Chicago)

GUY BERRYMAN PHILLIPS (1936), *Professor of Education and Director of the Summer School*

A.B., 1913 (North Carolina); M.A., 1942 (Columbia); D.Litt. (High Point College)

CLAUDE PIANTADOSI (1952), *Instructor in Pharmacy*

B.S. in Phar., 1949, M.S., 1952 (Columbia)

ANDREW WARREN PIERPONT (1946), *Associate Professor of Business Administration*

A.B., 1928 (Washington and Lee); M.B.A., 1931 (Harvard); Ph.D., 1953 (North Carolina)

WILLIAM WHATLEY PIERSON (1915), *Professor of History and Political Science and Dean of the Graduate School*

A.B., 1910, A.M., 1911 (Alabama); M.A., 1912, Ph.D., 1916 (Columbia); Litt.D. (Boston); LL.D. (Washington and Lee)

TULLIO JOSEPH PIGNANI (1954), *Lecturer in Mathematics*

B.S., 1948 (State Teachers College, Indiana, Pa.); M.S., 1949 (Bucknell)

WILLIAM HOWARD PLEMMONS (1943), *Professor of Education*

A.B., 1928 (Wake Forest); A.M., 1935 (Duke); Ph.D., 1943 (North Carolina)

LEON M. POLLANDER (1946), *Director of Advertising in the School of Journalism*

JOSEPH PORTNOY (1954), *Assistant Professor of Experimental Medicine*

B.S., 1936 (College of City of New York); M.S., 1937 (New York University); Ph.D., 1954 (Columbia)

CHARLES FRANCIS POSTON (1952), *Lecturer in Economics*

B.Ed., 1938 (Eastern State College); M.A., 1939 (Illinois)

WILLIAM HARDMAN POTEAT (1947), *Assistant Professor of Philosophy*

A.B., 1941 (Oberlin); B.D., 1944 (Yale); Ph.D., 1951 (Duke)

LEE HARRIS POTTER (1954), *Instructor in English*

A.B., 1948, M.A., 1950 (North Carolina)

*ROBERT ARMSTRONG PRATT (1951), *Professor of English*

A.B., 1929, Ph.D., 1933 (Yale)

CARLETON ESTEY PRESTON (1927), *Professor of Education, Emeritus*

A.B., 1899, A.M., 1900, Ph.D., 1902 (Harvard)

ALMOND DWIGHT PRICE (1954), *Clinical Instructor in Crown and Bridge Prosthodontics*

B.A., 1949, D.D.S., 1954 (North Carolina)

DANIEL O'HAVER PRICE (1947), *Professor of Sociology and Research Professor in the Institute for Research in Social Science*

B.S., 1939 (Florida Southern); A.M., 1942, Ph.D., 1948 (North Carolina)

RUTH I. PRICE (1949), *Assistant Professor of Physical Education*

B.S., 1926 (Columbia); M.S., 1936 (Southern California)

NEWTON GEORGE PRITCHETT (1952), *Clinical Instructor in Medicine*

M.D., C.M., 1943 (Dalhousie Medical School, Canada)

JAMES THORNTON PROCTOR (1954), *Instructor in Psychiatry*

A.B., 1943, M.D., 1946 (Kansas)

WILLIAM RUSSELL PULLEN (1951), *Assistant Professor of Political Science and Documents Librarian*

A.B., 1942, S.B. in L.S., 1947, A.M., 1948, Ph.D., 1951 (North Carolina)

WALTER WAGNER RABB (1946), *Associate Professor of Physical Education*

B.S., 1937 (North Carolina State); A.M. in Educ., 1941 (North Carolina)

ALBERT ERNEST RADFORD (1946), *Associate Professor of Botany*

B.S., 1939 (Furman); Ph.D., 1948 (North Carolina)

IRENE SMART RAINS (1940), *Lecturer in Dramatic Art and Costume Director of The Carolina Playmakers*

REBECCA GRIER RANDOLPH (1953), *Associate Professor of Social Work and Director of Social Service, North Carolina Memorial Hospital*

A.B., 1933 (Woman's College, U.N.C.); M.S.S., 1936 (William and Mary); M.S.W., 1943 (Pennsylvania)

* Absent on leave, spring and fall semesters, 1955.

RICHARD BEVERLY RANEY (1944), *Professor of Surgery in Charge of Orthopaedic Surgery*
A.B., 1926 (North Carolina); M.D., 1930 (Harvard)
MURPHY DALE RANSON (1925), *Instructor in Physical Education*
S.B.Comm., 1924 (North Carolina)
EDWIN ALBERT RASBERRY, JR. (1954), *Clinical Instructor in Medicine*
A.B., 1937 (North Carolina); M.D., 1941 (Pennsylvania)
SAMUEL FITSIMONS RAVENEL (1954), *Clinical Professor of Pediatrics*
A.B., 1918 (North Carolina); M.D., 1923 (Johns Hopkins)
JEAN INGRAM REBENTISCH (1950), *Associate Professor of Maternal and Child Health*
Diploma, 1929 (Methodist Hospital School of Nursing, Brooklyn); R.N.; B.S., 1940, M.A., 1943 (Teachers College, Columbia)
LOUIS DENO REED (1954), *Instructor in Surgery (Octolaryngology)*
B.S., 1951 (Pennsylvania State University)
SARAH REBECCA REED (1952), *Assistant Professor of Library Science*
A.B., 1936 (Cornell College); B.S. in L.S., 1941, M.S. in L.S., 1945 (Illinois)
JESSE REHDER (1947), *Lecturer in English*
A.B., 1929 (Randolph-Macon); M.A., 1931 (Columbia)
HERBERT WILLIAM REICHERT (1947), *Associate Professor of German*
B.A., 1938, M.A., 1940 (Columbia); Ph.D., 1942 (Illinois)
CHARLES NORWOOD REILLEY (1952), *Assistant Professor of Chemistry*
B.S. in Chem., 1947 (North Carolina); Ph.D., 1952 (Princeton)
ISAAC NEWTON REYNOLDS (1949), *Lecturer in Accounting*
B.S., 1948 (East Carolina College); S.M., 1951 (North Carolina)
OSCAR KNEFLER RICE (1936), *Professor of Chemistry*
B.S., 1924, Ph.D., 1926 (California)
RICHARD EDGEWORTH RICHARDSON (1952), *Assistant Professor of Oral Diagnosis and Treatment Planning*
D.D.S., 1937 (Maryland)
WILLIAM PERRY RICHARDSON (1936), *Professor of Preventive Medicine and Assistant Dean in Charge of Continuation Education; Research Professor of Public Health Administration*
A.B., 1926 (Wake Forest); M.D., 1928 (Medical College of Virginia); M.P.H., 1933 (Johns Hopkins)
JAMES MONROE RILEY (1954), *Instructor in Dramatic Art and Technical Director of the Carolina Playmakers*
A.B., 1948 (North Carolina); M.F.A., 1951 (Yale)
*JAMES STENIUS ROBERTS (1951), *Instructor in Political Science*
B.S., 1946 (Harvard); M.S. in P.A., 1950 (Southern California)
LOUIS C. ROBERTS (1953), *Clinical Instructor in Surgery*
B.S., 1930 (Davidson); M.D., 1934 (Duke)
CHARLES BASKERVILL ROBSON (1925), *Professor of Political Science*
A.B., 1919 (Davidson); A.M., 1924 (Princeton); Ph.D., 1930 (North Carolina)
ARTHUR ROE (1941), *Professor of Chemistry*
B.A., 1933 (Oberlin); M.A., 1935 (Colorado College); Ph.D., 1938 (Northwestern)
RUTH LOCKE ROETTINGER (1954), *Instructor in Political Science*
A.B., 1926 (Asbury College); M.A., 1927 (Kentucky); M.A., 1933 (Radcliffe)
MICHAEL Z. RONMAN (1936), *Instructor in Physical Education*
B.S., 1935, Ed.M., 1938 (Pennsylvania State)
ETHEL ABERNATHY ROSE (1954), *Instructor in Library Science and Librarian of the School of Library Science*
A.B., 1928 (Duke); B.S. in L.S., 1954 (North Carolina)
MILTON ROSENBAUM (1954), *Assistant Professor in Psychiatry and Psychology*
B.S.S., 1948, M.S., 1949 (City College of New York); Ph.D., 1954 (Texas)
WILLIAM EVERETT ROSENSTENGEL (1941), *Professor of Education*
B.S. in Ed., 1923 (Northeastern Missouri State Teachers College); A.M., 1927, Ph.D., 1931 (Missouri)
ROBERT ALEXANDER ROSS (1934), *Professor of Obstetrics and Gynecology*
S.B., 1920 (North Carolina); M.D., 1922 (Pennsylvania)
SAMARENDRA NATH ROY (1950), *Professor of Statistics*
B.Sc., 1928, M.Sc., 1931 (Calcutta)
CHAUNCEY LAKE ROYSTER (1952), *Clinical Associate Professor of Medicine*
A.B., 1931 (North Carolina); M.D., 1935 (Cornell)
HUBERT ASHLEY ROYSTER (1902-10; 1952), *Professor of Surgery, Emeritus*
A.B., 1891, Sc.D. (Wake Forest); M.D., 1894 (Pennsylvania)

* Resigned August, 1954.

THOMAS SAMPSON ROYSTER, JR. (1953), *Clinical Instructor in Surgery*
A.B., 1940 (North Carolina); M.D., 1943 (Pennsylvania)

CHARLES EVERETT RUSH (1941), *Professor of Library Science, Director of Libraries, and Chairman of the Library Division, Emeritus*
A.B., 1905 (Earlham College); B.L.S., 1908 (New York State Library School); Hon. A.M. (Yale)

CHARLES PHILLIPS RUSSELL (1931), *Professor of Journalism*
A.B., 1904 (North Carolina)

HARRY KITSUN RUSSELL (1929), *Professor of English*
A.B., 1923 (Davidson); A.M., 1928, Ph.D., 1931 (North Carolina)

WILL CARSON RYAN (1940), *Kenan Professor of Education*
A.B., 1907 (Harvard); Ph.D., Ed.D., 1918, LL.D. (George Washington)

ALTON GUY SADLER (1946), *Associate Professor of Accounting*
A.B., 1930 (Duke); M.S., 1937 (North Carolina); C.P.A. (State of Georgia)

ROBERT HENRY SAGER (1954), *Assistant Professor of Periodontology and Oral Pathology*
D.D.S., 1949 (Northwestern)

WILEY BRITTON SANDERS (1923), *Professor of Sociology*
A.B., 1919, A.M., 1920 (Emory); A.M., 1921 (North Carolina); Ph.D., 1929 (Chicago)

RODNEY GRANT SARLE (1951), *Lecturer in Business Administration*
A.B., 1946 (Brown); M.B.A., 1947 (Harvard)

JASON LEWIS SAUNDERS (1954), *Assistant Professor of Philosophy*
A.B., 1947 (Tufts); A.M., 1949, Ph.D., 1952 (Columbia)

GENEVIEVE YOST SCHEER (1950), *Serials Librarian*
A.B., 1928 (Missouri); B.S. in L.S., 1936 (Columbia)

*ROBERT FREDERIC SCHENKKAN (1946), *Associate Professor of Radio, Television, and Motion Pictures*
A.B., 1941 (Virginia); A.M., 1946 (North Carolina)

HERMAN MAX SCHIEBEL (1942), *Clinical Assistant Professor of Surgery*
A.B., 1929, M.D., 1933 (Johns Hopkins)

JAN PHILIP SCHINHAN (1935), *Professor of Music*
A.B., 1931, M.A., 1933 (California); Ph.D., 1937 (Vienna)

JAMES A. SCHOFIELD (1951), *Captain, United States Air Force; Assistant Professor of Air Science*
A.B., 1948 (The Citadel)

BYRON ARTHUR SCHOTTELIUS (1954), *Instructor of Physiology*
B.A., 1949 (Iowa); M.S., 1951 (State College of Washington); Ph.D., 1954 (Iowa)

JOHN HARRIS SCHWAB (1953), *Instructor in Bacteriology*
B.A., 1949, M.S., 1950, Ph.D., 1953 (Minnesota)

GUSTAV THEDOR SCHWENNING (1926), *Professor of Business Administration and Managing Editor, The Southern Economic Journal*
B.H., 1920 (Springfield); M.A., 1921, Ph.D., 1925 (Clark)

FRANK J. SCHWENTKER (1954), *Julian Price Lecturer in Life Insurance*
A.B., 1928 (Harvard); C.L.U., 1938 (American College of Life Underwriters)

HARRY MARTYN SCOBLE, JR. (1954), *Instructor in Political Science*
A.B., 1949 (Williams); A.M., 1952 (Yale)

ANNIE VELLNA SCOTT (1954), *Visiting Professor of Pediatrics*
B.S., 1914 (Woman's College of U. N. C.); M.D., 1918 (Woman's Medical College of Pennsylvania)

LUDWIG GASTON SCOTT (1954), *Clinical Instructor in Periodontology and Oral Pathology*
A.B., 1949, D.D.S., 1954 (North Carolina)

ROSS SCROGGS (1949), *Associate Director, Communication Center; Instructor in Physics; Instructor in Radio, Television, and Motion Pictures*
B.S., 1942 (North Carolina)

STUART WILSON SECHRIST (1946), *Associate Professor of Journalism*
A.B., 1935 (North Carolina)

SAMUEL SELDEN (1927), *Professor of Dramatic Art and Director of The Carolina Playmakers*
A.B., 1922 (Yale); Litt.D. (Illinois College)

FRED THEODOR SEMENIUK (1947), *Professor of Pharmaceutical Chemistry*
B.Sc., 1939 (Alberta); Ph.D., 1947 (Purdue)

WILLIAM JEFFRESS SENTER (1952), *Clinical Instructor in Medicine*
B.S., 1938 (Wake Forest); M.D., 1942 (Maryland)

* Absent on leave.

JOHN TURNER SESSIONS, JR. (1952), *Assistant Professor of Medicine*
B.S., 1943, M.D., 1945 (Emory)
HANSON DOUGLAS SESSOMS (1954), *Instructor of Sociology*
A.B., 1953 (North Carolina); M.S., 1954 (Illinois)
HARLEY CECIL SHANDS (1953), *Associate Professor of Psychiatry*
B.S., 1936, M.D., 1939 (Tulane); M.S. (Med.), 1945 (Minnesota)
*ROBERT JACK SHANKLE (1951), *Associate Professor of Operative Dentistry*
D.D.S., 1948 (Emory)
LAWRENCE ALBRIGHT SHARPE (1946-51; 1953), *Lecturer in Romance Languages*
A.B., 1940 (North Carolina)
ROBERT BOIES SHARPE (1931), *Professor of English*
A.B., 1918 (Wesleyan); M.A., 1923 (Wisconsin); Ph.D., 1928 (Yale)
PAUL EDMONDSON SHEARIN (1936), *Professor of Physics*
A.B. in Educ., 1929, A.M., 1930 (North Carolina); Ph.D., 1934 (Ohio State)
FREDERICK CARLYLE SHEPARD (1946), *Adviser to Veterans*
A.B., 1921, A.M., 1926, Ph.D., 1938 (North Carolina)
GEORGE EDWARD SHEPARD (1929), *Professor of Physical Education*
S.B., 1929 (North Carolina); M.A., 1940, Ed.D., 1948 (Columbia)
BASIL LAMAR SHERRILL (1950), *Assistant Director of the Institute of Government and Associate Research Professor in Public Law and Government*
A.B., 1947, J.D., 1950 (North Carolina)
CLAUDE C. SHOTTS (1947), *General Secretary, Y.M.C.A.*
B.S. in E.E., 1922 (Alabama); B.D., 1925 (Yale)
WALTER ALLEN SIKES (1954), *Clinical Instructor in Psychiatry*
B.S., 1945 (Georgia); M.D., 1946 (Medical College of Georgia)
GEORGE L. SIMPSON, JR. (1950), *Associate Professor of Sociology and Research Associate in the Institute for Research in Social Science*
A.B., 1941, A.M., 1944, Ph.D., 1951 (North Carolina)
WILLIAM VANCE SINGLETARY (1952), *Clinical Instructor in Medicine*
A.B., 1940 (North Carolina); M.D., 1943 (Duke)
JOSEPH CARLYLE SITTERSON (1935), *Professor of History*
A.B., 1931, A.M., 1932, Ph.D., 1937 (North Carolina)
JOHN RICHARD SKRETTING (1952), *Assistant Professor of Education*
B.A., 1947 (Beloit College); M.A., 1949, Ph.D., 1952 (Iowa)
EARL ANDERSON SLOCUM (1933), *Professor of Music*
B.Mus., 1931, M.M., 1936 (Michigan)
GEORGE J. SMITH (1953), *Colonel, United States Air Force; Professor of Air Science*
B.S., 1924 (United States Military Academy); LL.B., 1930 (Fordham)
HARRY SMITH, JR. (1953), *Assistant Professor of Biostatistics in the Institute of Statistics and the School of Public Health*
B.A., 1943, M.A., 1948 (Delaware); Ph.D., 1954 (North Carolina State)
HARVEY L. SMITH (1952), *Associate Professor of Sociology and Research Associate in the Institute for Research in Social Science and the Division of Health Affairs*
B.A., 1941, M.A., 1947, Ph.D., 1949 (Chicago)
JULIA DUPUY SMITH (1954), *Associate Professor of Public Health Nursing*
A.B., 1923 (Hollins); Diploma in Nursing, 1928 (Hospital of the University of Pennsylvania); R.N.; M.A., 1937 (Columbia)
VAUGHN SMITH (1954), *Research Associate in Public Health*
B.S., 1935 (Denver); M.P.H., 1947 (North Carolina); Ph.D., 1954 (Michigan)
WALTER LAWS SMITH (1954), *Assistant Professor of Statistics*
B.A., 1947, M.A., 1951, Ph.D., 1953 (Cambridge)
CLARENCE LEE SOCKWELL (1952), *Assistant Professor of Operative Dentistry*
D.D.S., 1952 (Emory)
CLEMENS SOMMER (1939), *Professor of the History of Art*
Ph.D., 1919 (Freiburg)
JOHN MITCHELL SORROW (1954), *Instructor in Medicine*
B.S., 1943 (North Carolina); M.D., 1946 (Pennsylvania)
EVANGELINE ELEANOR SOUTSOS (1953), *Instructor in Nursing*
Diploma in Nursing, 1947 (Boston City Hospital); R.N.; B.S., 1952, M.S., 1953 (Boston)
ROBERT SPRUILL SPAIN (1954), *Clinical Instructor in Medicine*
B.S., 1944 (North Carolina); M.D., 1946 (Washington University)
LUCILLE STUART SPALDING (1951), *Professor of Nursing*
Diploma in Nursing, 1931 (Washington University School of Nursing); R.N.; B.S., 1935 (Washington University); C.P.H.N., 1939, M.S., 1946 (Western Reserve)

* Absent on leave for military duty.

WALTER SPEARMAN (1935), *Professor of Journalism*
A.B., 1929, A.M., 1937 (North Carolina)

CORYDON PERRY SPRUILL (1922), *Professor of Economics and Dean of the General College*
A.B., 1920 (North Carolina); B.Litt., 1922 (Oxford)

WILLIAM HUTCHINSON SPRUNT, III (1952), *Assistant Professor of Radiology*
B.S., 1942 (Davidson); M.D., 1945 (Harvard)

HERMAN HENRY STAAB (1917), *Associate Professor of Romance Languages, Emeritus*
B.A., M.A., 1912 (University of the South)

MRS. MARVIN HENDRIX STACY (1919), *Dean of Women, Emeritus*
Graduate, 1907 (N. C. State Normal and Industrial College)

THOMAS MELVILLE STANBACK, JR. (1947), *Assistant Professor of Economics*
S.B., 1940 (North Carolina); M.B.A., 1942 (Harvard); Ph.D., 1954 (Duke)

LOIS FOOTE STANFORD (1940), *Clinical Assistant Professor of Medicine*
M.D., 1921 (Pennsylvania)

WILLIAM RANEY STANFORD (1934), *Clinical Associate Professor of Medicine*
A.B., 1915 (North Carolina); M.D., 1919 (Pennsylvania)

ALEXANDER LAMARR STEPHENS (1954), *Instructor in English*
A.B., 1940 (Yale); M.A., 1947 (Mississippi)

FREDERICK W. STOCKER (1952), *Clinical Consultant in Surgery (Ophthalmology)*
M.D., 1920 (Bern)

STERLING AUBREY STOUDEMIRE (1923), *Professor of Spanish*
A.B., 1923, A.M., 1924, Ph.D., 1930 (North Carolina)

FLOYD STOVALL (1949), *Professor of English*
A.B., 1923, M.A., 1924, Ph.D., 1927 (Texas)

JOSEPH WARD STRALEY (1944), *Associate Professor of Physics*
B.S. in Ed., 1936 (Bowling Green State University); M.Sc., 1937, Ph.D., 1941 (Ohio State)

WILLIAM RINGGOLD STRAUGHN, JR. (1944), *Assistant Professor of Bacteriology*
B.S., 1935 (Pennsylvania State Teachers College); M.S., 1940 (Cornell)

HAMMOND STRAYHORN (1946), *Instructor in Physical Education*
S.B., 1938, A.M., 1949 (North Carolina)

CLIFFORD MAX STURDEVANT (1950), *Associate Professor of Operative Dentistry*
D.D.S., 1943 (Emory)

ROGER EDWARD STURDEVANT (1950), *Professor of Operative Dentistry and Superintendent of Dental Clinics*
D.D.S., 1916 (Nebraska)

KENNETH SUGIOKA (1954), *Assistant Professor in Surgery (Anesthesiology)*
B.S., 1946 (Denver); M.D., 1949 (Washington University)

ESTHER KATHERINE SUMP (1952), *Associate Professor of Medical Nursing*
Diploma in Nursing, 1932 (Sharon General Hospital, Sharon, Pa.); R.N.; B.S., 1938 (Ohio State); M.S., 1947 (Western Reserve); P.H.N., 1952 (Michigan)

ALBERT IRVING SUSKIN (1936), *Professor of Latin*
A.B. in Educ., 1931, A.M., 1932, Ph.D., 1937 (North Carolina)

BENJAMIN FRANKLIN SWALIN (1935), *Professor of Music in Extension; Director, North Carolina Symphony Orchestra*
B.S., 1928, M.A., 1930 (Columbia); Ph.D., 1932 (Vienna); Diplomas, 1926, 1928 (Institute of Musical Art, New York City); Diplomas, 1932 (Hochsule für Musik, Vienna)

MARGARET CATHERINE SWANTON (1948), *Assistant Professor of Pathology*
A.B., 1943 (North Carolina); M.D., 1946 (Johns Hopkins)

JOSEL SZEPSENWOL (1954), *Visiting Associate Professor of Anatomy*
B.Med.Sci., 1929; M.D., 1931; Privat Docent, 1937 (Geneva, Switzerland)

ERNEST WILLIAM TALBERT (1949), *Professor of English*
A.B., 1929 (San Jose State College); M.A., 1931, Ph.D., 1936 (Stanford)

DONALD GENTRY TARBET (1952), *Assistant Professor of Education*
B.S., 1938, M.E., 1946, Ed.D., 1952 (Missouri)

HENRY TAUBER (1950), *Associate Professor of Experimental Medicine*
Ph.D., 1927 (Vienna)

*CHARLES BRUCE TAYLOR (1951), *Associate Professor of Pathology*
B.S., 1938, M.B., 1940, M.D., 1941 (Minnesota)

GEORGE COFFIN TAYLOR (1925), *Kenan Professor of English, Emeritus*
A.B., 1897, Litt.D. (South Carolina); A.M., 1899 (Harvard); Ph.D., 1906 (Chicago)

GEORGE VANDERBECK TAYLOR (1952), *Assistant Professor of History and Social Science*
B.A., 1941 (Rutgers); M.A., 1949, Ph.D., 1950 (Wisconsin)

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* Resigned September 1, 1954.

HARDEN FRANKLIN TAYLOR (1949), *Consultant in the Institute of Fisheries Research*

A.B., 1913 (Trinity College); Sc.D. (Duke)

ISAAC MONTROSE TAYLOR (1952), *Assistant Professor of Medicine*

A.B., 1942 (North Carolina); M.D., 1945 (Harvard)

JAMES ALEXANDER TAYLOR (1949), *Associate University Physician and Clinical Assistant Professor of Medicine*

A.B., 1939 (North Carolina); M.D., 1943 (Harvard)

WILLIAM WEST TAYLOR (1952), *Instructor in Hospital Pharmacy and Chief Pharmacist, North Carolina Memorial Hospital*

S.B., 1947 (North Carolina)

WILLIAM ADOLPH TERRILL (1951), *Associate Professor of Accounting*

B.B.A., 1938, B.S., 1940 (Cincinnati); M.S., 1949, Ph.D., 1952 (Illinois); C.P.A., 1952 (State of Illinois)

JAMES D. THAYER (1950), *Assistant Professor of Experimental Medicine*

B.S., 1929, M.S., 1931, Ph.D., 1936 (Washington)

JOHN WALTHER THIBAUT (1953), *Associate Professor of Psychology and Sociology and Research Associate in the Institute for Research in Social Science*

B.A., 1939 (North Carolina); Ph.D., 1949 (Massachusetts Institute of Technology)

COLIN G. THOMAS, JR. (1952), *Assistant Professor of Surgery*

B.S., 1940, M.D., 1943 (Chicago)

HERMAN ORA THOMPSON (1946), *Professor of Pharmacy*

S.B. in Phar., 1937 (North Carolina); M.S., 1940, Ph.D., 1944 (Purdue)

*EDGAR F. THORNE (1955), *Visiting Lecturer in Art*

A.B., 1941, A.M. 1949 (North Carolina)

MARY LINDSAY THORNTON (1917), *Librarian, North Carolina Collection*

A.B., 1939, A.M., 1943 (North Carolina)

LOUIS LEON THURSTONE (1952), *Research Professor of Psychology and Director of the Psychometric Laboratory*

M.E., 1912 (Cornell); Ph.D., 1917 (Chicago); Ph.D. (H. C.), 1954 (Goteborg University, Goteborg, Sweden)

THELMA GWINN THURSTONE (1952), *Professor of Education*

A.B., 1917, B.S. in Ed., 1920 (Missouri); A.M., 1923 (Carnegie Institute of Technology); Ph.D., 1926 (Chicago)

HENRY ROLAND TOTTEN (1913), *Professor of Botany*

A.B., 1913, A.M., 1914, Ph.D., 1923 (North Carolina)

RALPH MCCOY TRIMBLE (1922), *Professor of Applied Mathematics*

C.E., 1921 (Virginia); S.M., 1927 (North Carolina)

†BASIL LIONEL TRUSCOTT (1951), *Assistant Professor of Anatomy*

B.A., 1939 (Drew); M.A., 1940 (Syracuse); M.S., 1942, Ph.D., 1943, M.D., 1950 (Yale)

VALENTIN IVANOVICH TSONEV (1952), *Research Associate in the Institute for Research in Social Science*

Degree of Mechanical Engineer, 1930 (Lomonosov Institute of Technology, Moscow)

LARRY TURNER (1952), *Consultant in Surgery (Ophthalmology)*

A.B., 1935, M.D., 1939 (Duke)

EUNICE NICKERSON TYLER (1945), *Professor of Public Health Education*

Ph.B., 1931 (Brown); C.P.H., 1933, M.P.H., 1936, Ph.D., 1946 (Yale)

‡SHEPPARD YOUNG TYREE, JR. (1946), *Associate Professor of Chemistry*

B.S., 1942, Ph.D., 1946 (Massachusetts Institute of Technology)

BERTHOLD LOUIS ULLMAN (1944), *Kenan Professor of Classical Languages and Literatures*

A.B., 1903, Ph.D., 1908 (Chicago)

RUPERT BAYLESS VANCE (1929), *Kenan Professor of Sociology and Research Professor in the Institute for Research in Social Science*

A.B., 1920 (Henderson-Brown); A.M., 1921 (Vanderbilt); Ph.D., 1928 (North Carolina); LL.D. (Hendrix College); LL.D., 1954 (University of Arkansas)

CHARLES DURWARD VAN CLEAVE (1940), *Associate Professor of Anatomy*

A.B., 1925 (Colorado); Ph.D., 1928 (Chicago)

§C. ROBERT VANDER VOORT (1953), *Clinical Instructor in Crown and Bridge Prosthodontics*

A.B., 1947 (Notre Dame); D.D.S., 1953 (Pennsylvania)

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* Spring semester, 1955.
† Resigned September 1, 1954.
‡ Absent on leave, 1954-1955.
§ Resigned June 30, 1954.

*MAURICE TAYLOR VAN HECKE (1921), *Professor of Law*
Ph.B., 1916, J.D., 1917 (Chicago)
WALTER WEDDLE VAUGHAN (1940), *Clinical Associate Professor of Radiology*
A.B., 1929 (North Carolina); M.D., 1933 (Jefferson Medical College)
PETER PAUL VAUGHN (1954), *Instructor in Anatomy*
B.A., 1950 (Brooklyn College); M.A., 1952, Ph.D., 1954 (Harvard)
GEORGE PIERCY VENNART (1954), *Instructor in Pathology*
A.B., 1948 (Wesleyan); M.D., 1953 (Rochester)
PAUL WESLEY VINTON (1952), *Associate Professor of Prosthodontics*
A.B., 1939, B.S., 1940 (Alabama); D.M.D., 1947 (Tufts College Dental School)
ROBERT BROWN VOITLE (1952), *Assistant Professor of English*
A.B., 1949, A.M., 1950, Ph.D., 1954 (Harvard)
GUELDA ELLIOTT VON BECKERATH (1922), *Business Administration Librarian*
A.B., 1943 (North Carolina)
PAUL WOODFORD WAGER (1926), *Professor of Political Science*
B.S., 1917 (Hobart College); A.M., 1920 (Haverford); Ph.D., 1927 (North Carolina)
ROBERT HOWARD WAGNER (1950), *Research Associate in Pathology*
A.B., 1943 (DePauw); Ph.D., 1950 (Cincinnati)
WOODROW WILSON WALKER (1953), *Clinical Instructor in Periodontology and Oral Pathology*
D.D.S., 1947 (Indiana)
WESLEY H. WALLACE (1952), *Assistant Professor of Radio, Television, and Motion Pictures*
B.S., 1932 (North Carolina State); M.A., 1954 (North Carolina)
LOUISE MURPHY WARD (1952), *Instructor in Bacteriology and Research Associate in Medicine*
A.B., 1933 (Woman's College, U.N.C.); M.P.H., 1947 (Michigan)
RALPH M. WATKINS (1953), *Clinical Associate Professor of Medicine*
B.S., 1918, M.D., 1920 (Syracuse)
FREDERICK HENRY WEAVER (1946), *Dean of Student Affairs*
A.B., 1937 (North Carolina); A.M., 1950 (Harvard)
ALEXANDER WEBB, JR. (1953), *Clinical Assistant Professor of Surgery*
A.B., 1933 (North Carolina); M.D., 1937 (Harvard)
JAMES MURRAY WEBB (1947), *Associate Professor of Planning*
A.B. in Architecture, 1937 (California); M.C.P., 1946 (Massachusetts Institute of Technology)
WARNER LEE WELLS (1952), *Assistant Professor of Surgery*
A.B., 1934, M.D., 1938 (Duke)
WILLIAM SMITH WELLS (1935), *Professor of English*
A.B., 1929, A.M., 1930 (Southern California); Ph.D., 1935 (Stanford)
GEORGE SCHLAGER WELSH (1953), *Associate Professor of Psychology and Research Associate in the Institute for Research in Social Science*
A.B., 1940 (Pennsylvania); Ph.D.,1949 (Minnesota)
LOUIS GORDON WELT (1952), *Professor of Medicine*
A.B., 1934 (New York); M.D., 1938 (Yale)
JAMES QUINTER WENGER (1954), *Assistant Professor of Oral Surgery*
D.D.S., 1938 (Temple); M.S.D., 1943 (Northwestern)
CHARLES MARTIN WESTRICK (1952), *Associate Professor of Oral Surgery*
D.D.S., 1948 (Michigan)
ROBERT HASLEY WETTACH (1921), *Professor of Law*
A.B., 1913, M.A., 1914, LL.B., 1917 (Pittsburgh); S.J.D., 1921 (Harvard)
THOMAS ROSS WHEATLEY (1953), *Commander, United States Navy; Associate Professor of Naval Science*
B.S., 1950 (Utah State)
WALTER HALL WHEELER (1951), *Assistant Professor of Geology*
B.S., 1945, M.S., 1948 (Michigan); Ph.D., 1951 (Yale)
PAUL FREDERICK WHITAKER (1953), *Clinical Associate Professor of Medicine*
M.D., 1922 (Medical College of Virginia); LL.D. (North Carolina)
KERR LACHLAN WHITE (1953), *Assistant Professor of Medicine and Research Associate in the Institute for Research in Social Science*
B.A., 1940, M.D., C.M., 1949 (McGill)
RICHARD ARNOLD WHITE (1939), *Instructor in Physical Education*
WILLIAM ALEXANDER WHITE (1944), *Professor of Geology*
A.B., 1930 (Duke); A.M., 1931, Ph.D., 1938 (North Carolina); M.S., 1934 (Montana School of Mines)

* Absent on leave, spring semester, 1955.

ARTHUR MURRAY WHITEHILL, JR. (1949), *Associate Professor of Business Administration*
B.S., 1942, M.A., 1943, Ph.D., 1945 (Virginia)

MAURICE WHITTINGHILL (1942), *Professor of Zoology*
A.B., 1931 (Dartmouth); Ph.D., 1937 (Michigan)

*WILLIAM M. WHYBURN (1948), *Kenan Professor of Mathematics*
A.B., 1922, M.A., 1923, Ph.D., 1927 (Texas); LL.D., (Texas Technological College)

CURTIS ROBERT WICK (1953), *Lieutenant, United States Navy; Assistant Professor of Naval Science*
B.S., 1947 (United States Naval Academy)

WILLIAM LEON WILEY (1925-28; 1931), *Professor of French*
A.B., 1921 (Chattanooga); A.M., 1925, Ph.D., 1930 (Harvard)

CHARLES B. WILKERSON (1952), *Clinical Instructor in Medicine*
A.B., 1941 (North Carolina); M.D., 1944 (Medical College of Virginia)

AUSTIN BEATTY WILLIAMS (1952), *Assistant Professor in the Institute of Fisheries Research*
A.B., 1943 (McPherson); Ph.D., 1951 (Kansas)

CHARLES DAVID WILLIAMS, JR. (1954), *Instructor in Medicine*
B.S., 1946 (Wofford College); M.D., 1950 (Duke)

F. JEAN WILLIAMS (1953), *Instructor in Nursing*
Diploma in Nursing, 1935 (Garfield Memorial Hospital, Washington, D. C.); R.N.; B.S.P.H.N., 1948 (Catholic University)

LENA MAE WILLIAMS (1948), *Order Librarian*
A.B., 1930, A.M., 1931, S.B. in L.S., 1944 (North Carolina)

HENRY STUART WILLIS (1954), *Clinical Associate Professor of Medicine*
B.A., 1914 (North Carolina); M.D., 1919, M.A., 1920 (Johns Hopkins)

ALICE S. WILSON (1954), *Visiting Lecturer in Classics*
A.B., 1939 (Ladycliff-on-the-Hudson); M.A., 1943, Ph.D., 1947 (Cornell)

EVERETT EUGENE WILSON (1951), *Associate Professor of Social Work*
B.S., 1932 (State Teachers College, Millersville, Pa.); M.S.W., 1938 (Pennsylvania School of Social Work)

JOHN ERIC WILSON (1950), *Assistant Professor of Biochemistry and Nutrition*
S.B., 1941 (Chicago); M.S., 1944 (Illinois); Ph.D., 1948 (Cornell)

LOUIS ROUND WILSON (1901-32; 1942), *Professor of Library Science and Administration*
A.B., 1899, A.M., 1902, Ph.D., 1905 (North Carolina); Litt.D. (Denver); LL.D. (Haverford; North Carolina); L.H.D. (Catawba)

WALTER HOWARD WILSON (1952), *Clinical Assistant Professor of Medicine*
A.B., 1933 (North Carolina); M.D., 1937 (Jefferson)

REX SHELTON WINSLOW (1929), *Professor of Economics and Director, Bureau of Business Services and Research, School of Business Administration*
A.B., 1923 (Simpson College); A.M., 1929 (Illinois); Ph.D., 1936 (North Carolina)

ARTHUR SIMEON WINSOR (1919), *Professor of Mathematics*
A.B., 1914, A.M., 1915 (Mount Allison College); Ph.D., 1927 (Johns Hopkins)

FRANK COUNSEL WINTER (1953), *Assistant Professor of Surgery (Ophthalmology)*
B.A., 1943, M.D., 1946 (Stanford)

WILLIAM ALPHONSO WITHERS (1952), *Clinical Instructor in Medicine*
A.B., 1932 (North Carolina); M.D., 1937 (Chicago)

HARRY DEMERLE WOLF (1928), *Professor of Economics*
B.S., 1922 (Kansas State Teachers College); A.M., 1923, Ph.D., 1926 (Chicago)

NATHAN ANTHONY WOMACK (1951), *Professor of Surgery*
S.B., 1922 (North Carolina); M.D., 1924 (Washington University)

†CARROLL EMORY WOOD, JR. (1951), *Associate Professor of Botany*
B.S., 1941 (Roanoke College); M.S., 1943 (Pennsylvania); A.M., 1947, Ph.D., 1949 (Harvard)

ERNEST HARVEY WOOD (1952), *Professor of Radiology*
B.A., 1935 (Duke); M.D., 1939 (Harvard)

JAMES WATSON WOODS (1953), *Assistant Professor of Medicine*
A.B., 1939 (Tennessee); M.D., 1943 (Vanderbilt)

‡GEORGE MILTON WOODWARD (1947), *Lecturer in Economics*
A.B., 1932, M.A., 1933 (Vanderbilt)

JOHN BROOKS WOOSLEY (1920), *Kenan Professor of Finance, Emeritus*
A.B., 1912 (Guilford College); A.B., 1913, A.M., 1914 (Haverford); Ph.D., 1931 (Chicago)

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* Absent on leave, 1954-1955.
† Resigned September, 1954.
‡ Absent on assigned leave, 1954-1955.

THOMAS CLARKSON WORTH (1953), *Clinical Assistant Professor of Radiology*
B.S., 1934 (North Carolina); M.D., 1936 (Harvard)
ISAAC CLARK WRIGHT (1952), *Clinical Instructor in Medicine*
B.S., 1942 (North Carolina); M.D., 1944 (Maryland)
JOHN JOSEPH WRIGHT (1947), *Professor of Public Health Administration*
A.B., 1931, M.D., 1935 (Vanderbilt); M.P.H., 1939 (Johns Hopkins)
EARL WYNN (1938), *Professor of Radio, Television, and Motion Pictures and Director of the Communication Center*
A.B., 1932 (Augustana College); M.S., 1934 (Northwestern)
FRANCES LYDIA YOCOM (1946), *Catalogue Librarian*
A.B., 1921 (Oberlin); B.L.S., 1931 (Western Reserve); M.A. in L.S., 1939 (California)
DAVID ALEXANDER YOUNG (1945), *Clinical Professor of Psychiatry*
A.B., 1928 (North Carolina); M.D., 1931 (Harvard)
JOHN E. YOUNG (1950), *Lecturer in Radio, Television, and Motion Pictures*
A.B., 1948 (North Carolina); M.A., 1951 (Northwestern)
J. OWEN YOUNG (1951), *Major, United States Air Force; Assistant Professor of Air Science*
B.B.A., 1941 (Miami)
HENRY STANLY ZAYTOUN (1952), *Clinical Instructor in Prosthodontics*
D.D.S., 1946 (Maryland)

GRADUATE APPOINTMENTS, 1954-1955

Teaching Fellows

MART GELZER BALDWIN, B.S. ..... Chemistry
ELIZABETH ANNE BARBER, B.A. ..... History
MONT JACKSON BRIGHT, JR., B.S. ..... Geology & Geography
ROBERT TERRY CAMPBELL, B.S. ..... Chemistry
JOHN HENRY CRABTREE, A.M. ..... English
THOMAS L. GILLETTE, M.A. ..... Sociology & Anthropology
JOHN NORMAN GODFREY, B.S. ..... Chemistry
ROBERT D. HALL, B.B.A. ..... Economics & Business Administration
MORTON Y. JACOBS, A.B. ..... English
BARCLAY GIBBS JONES, A.B., B.Arch. ..... Economics & Business Administration
FRANCIS EDWARD KEARNS, B.A. ..... English
BERNARD MARTIN LEVIN, M.A. ..... Psychology
J. O. MOORE, M.A. ..... Romance Languages
MILOSLAV NEKVASIL, M.S., M.A. ..... Political Science
OSCAR HALL PARIS, JR., A.B. ..... Zoology
E. M. PARTIN, A.B. ..... Romance Languages
MARY GRAY PORTER, A.B. ..... German
TRICIA REEVES, B.A. ..... Physics
D. P. RIPLEY, A.M. ..... Romance Languages
TALBOT R. SELBY, A.B. ..... Classics
MARION B. SMITH, JR., M.S. ..... Mathematics
DIFFEE WILLIAM STANDARD, M.A. ..... History
WILLARD SWIERS, A.M. ..... Education
EDWIN A. TRAYNOR, A.B. ..... Mathematics
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Part Two

GENERAL INFORMATION

THE UNIVERSITY

Historical Sketch of the University of North Carolina

The University of North Carolina, provided for in the state constitution in 1776 and chartered in 1789, laid the cornerstone of its first building in 1793 and opened its doors to students in 1795. It thereby became the first state university in the United States to admit students and send them out into the nation bearing a state university diploma.

The origin of the University may be traced to Section XLI of the North Carolina Constitution of 1776, which declared that "all useful learning shall be duly encouraged and promoted in one or more universities." Sponsored by William Richardson Davie, "father of the University," the University was chartered by the General Assembly through an act passed December 11, 1789, which declared that "in all well regulated Governments, it is the indispensable duty of every Legislature to consult the Happiness of a rising Generation, and endeavor to fit them for an honorable Discharge of the Social Duties of Life, by paying the strictest attention to their Education." On December 21, 1789, the General Assembly passed an accompanying act providing for the erection of buildings and for the support of the University through escheats and arrearages due the state.

A special meeting of the Board of Trustees was held at Fayetteville on December 18, 1789, to accept Benjamin Smith's offer of 20,000 acres of land. The first regular meeting of the trustees occurred at Fayetteville on November 15, 1790, as required by the charter. In 1792, a committee headed by Frederick Hargett selected New Hope Chapel, now Chapel Hill, as the site for the University. On October 12, 1793, Davie, as Grand Master of Masons, laid the cornerstone of Old East, the first building. Formal opening exercises were held January 15, 1795, but the first student did not arrive "on the hill" until February 12. For two weeks he was the student body. At the end of the term there were two professors and forty-one students.

The University began its career with a gift of land warrants for 20,000 acres, cash amounting to $2,706.41, and a loan of $10,000 (afterward converted into a gift) made by the legislature in 1791 as

a result of the interest and leadership of Davie as a member of the House. By constant struggle and periodic appeals for private benefactions, the institution grew despite general poverty, opposition to taxation, denominational hostility, and sectional controversies between eastern and western North Carolina. The General Assembly made no specific appropriations for its maintenance until 1881, but through the act passed in 1789 it exempted the University from taxation and made it the beneficiary of escheats and arrearages due the state; and in 1867 it appropriated $7,000 to pay to officers indebtedness incurred during and immediately after the Civil War.

Before 1804, the University was under a succession of "presiding professors." This was not a satisfactory system, and in 1804, Joseph Caldwell was elected the first president. Under Caldwell (1804-1812, 1817-1835), the University grew from a small classical school into a creditable liberal arts college. After 1815, natural sciences were placed on terms of equality with the humanities.

When Caldwell was succeeded by David L. Swain in 1835, the University was widely known as a center of sound scholarship and teaching. During his long tenure (1835-1868), Swain devoted his administration to a program of drawing the institution and the state close together. More emphasis was placed on subjects designed to prepare men for public service—history, law, rhetoric, and public speaking. The ideal of public service overshadowed general culture prior to 1860. During these years, the enrollment of the University reached a peak of 456 (1858), and its alumni included one president of the United States, one vice-president, seven cabinet officials, ten United States senators, forty-one representatives in Congress, fifteen state governors, and many state judges and legislators. From 1814, when a University alumnus first became governor, until the present time, twenty-seven of the forty-seven governors of North Carolina have studied at Chapel Hill.

The University remained open during the Civil War, although most of its faculty and students joined the Confederate armies. Reconstruction, however, closed its doors for five years (1870-1875). Through the efforts of the alumni and Mrs. Cornelia Phillips Spencer, a Chapel Hill resident, the University was reopened in 1875.

By the constitution adopted in 1868 the General Assembly has "power to provide for the election of Trustees of the University of North Carolina, in whom, when chosen, shall be vested all the privileges, rights, franchises and endowments thereof in anywise granted to or conferred upon the trustees of said University; and the General Assembly may make such provisions, laws and regulations, from time to time, as may be necessary and expedient for the maintenance and

management of said University." The governor of the state is, ex-officio, president of the Board of Trustees.

The same constitution, in connection with "Benefits of the University," further states: "The General Assembly shall provide that the benefits of the University, as far as practicable, be extended to the youth of the State free of expense for tuition; also, that all the property which has heretofore accrued to the State, or shall hereafter accrue, from escheats, unclaimed dividends, or distributive shares of the estates of deceased persons, shall be appropriated to the use of the University."

In 1875 the University reopened with the Reverend Dr. Charles Phillips as Chairman of the Faculty (1875-1876). From 1876 to 1953 the University has had eight presidents, each of whom has contributed to its expansion and progress. Dr. Kemp Plummer Battle (1876-1891) reorganized the University (1876), established the first summer normal session in the South (1877), secured the first regular appropriation for maintenance (1881), and wrote a two-volume history of the University. George Tayloe Winston (1891-1896) "made its campus the dwelling place of dynamic democracy and a citadel against the forces of intolerance and bigotry." Edwin Anderson Alderman (1896-1900) opened its doors to women. During the administration of Francis Preston Venable (1900-1914), the University's financial condition improved, the physical plant was considerably expanded, athletics were encouraged, and creative scholarship was required of the faculty. The brief administration of Edward Kidder Graham (1914-1918) was notable for the enlargement of the University's service to the state, increased resources, and a strengthening of student morale.

In the summer of 1917 the University was the recipient of a legacy from Mrs. Mary Lily Kenan (Flagler) Bingham, which amounted to $75,000 per year for twenty-one years, after which the principal was given outright. The "Kenan Professorships Fund" thus established is, according to the will, to be "perpetually used . . . for the purpose of paying the salaries of professors" who are to be known as "Kenan Professors," the bequest "being given in the interest of education of the youth of North Carolina." Elevation to a Kenan Professorship, with its corresponding salary increase, made on the basis of distinction in research, in teaching, or in service to the University and the state, is an honor which, since 1918, has been given to forty-three professors, sixteen of whom are still active. Through the years the Kenan Fund has enabled the University to retain on its faculty and to attach to it scholars and teachers of wide reputation and recognized leadership.

The administration of President Harry Woodburn Chase (1919-1930) was marked by rapid physical expansion, and achievement of

an international reputation for high standards of scholarship and freedom in research and teaching. Student enrollment increased rapidly, and maintenance appropriations reached $894,379 in 1928-1929. Increasing emphasis was shown in social sciences and graduate work. The Graduate School was reorganized in 1920, the University of North Carolina Press was incorporated in 1922, and the Institute for Research in Social Science was organized in 1924. Early in the decade professional schools of engineering and commerce were inaugurated.

Under President Frank Porter Graham (1930-1949) University progress continued. The administrative consolidation of the University of North Carolina, the North Carolina College for Women at Greensboro, and the North Carolina State College of Agriculture and Engineering at Raleigh into the University of North Carolina was effected in 1932. New schools and divisions were added at Chapel Hill—Library Science in 1931, the General College in 1935, and Public Health in 1936. The Institute of Government became a part of the University in 1942, the Communication Center was established in 1945, and the School of Education, discontinued in 1933, was re-instituted in 1948. New departments were added—City and Regional Planning in 1946, Radio in 1947, and Religion in 1947. In 1949, the $3,000,000 Morehead Building and Planetarium was completed.

The Division of Health Affairs, organized in 1949 for the purpose of integrating the work of all of the health professional schools and the hospital, includes the schools of Medicine, Public Health, Pharmacy, Dentistry, and Nursing; and the North Carolina Memorial Hospital. In 1950, a School of Social Work and a School of Journalism were established, and the School of Commerce became the School of Business Administration.

In the development of the consolidation process, Robert Burton House was selected by President Graham and duly confirmed by the Trustees in 1934 to serve as Dean of Administration of the University at Chapel Hill. In 1945, Dean House's title was changed by the Trustees to Chancellor of the University at Chapel Hill and Vice-President of the University of North Carolina.

In World War II the University rendered noteworthy service. Some 20,000 officers and cadets in naval aviation were trained in the United States Navy Pre-Flight School, established in 1942. A naval R.O.T.C. unit, established in 1940, still continues, and a Navy V-12 program was set up. Army and Army Air Corps groups were also trained.

Upon the appointment of President Graham to the Senate of the United States in March, 1949, Controller W. D. Carmichael, Jr., be-

came Acting President; and in February, 1950, Gordon Gray was elected President, assuming office in September, 1950. President Gray's administration has seen continued growth of the physical plant of the University, the opening of the North Carolina Memorial Hospital, the Dental Clinic, the Nurses' home, and a unit of the State Tuberculosis Hospital, The Gravely Sanatorium. Under his guidance, the University is operating an F. M. Radio Station and has secured an Educational Television license. Over a million dollars in private gifts has been secured for building the transmitter, and plans for its operation as a University enterprise are well under way.

With the growth of the University has come a need for the redefining of the relation of the faculty to the University. On November 6, 1942, the General Faculty authorized the appointment of a committee, under the chairmanship of Professor John M. Booker, to study faculty government and prepare a report embodying a uniform set of principles defining the powers, duties, and status of the various divisions which constitute the University. The committee, known as the Committee on University Government, submitted its report in sections during the next eight years. On May 10, 1950, the General Faculty adopted, in its entirety, the new instrument known as "Faculty Legislation on University Government," with the provision that it go into effect in January, 1951.

The chief departure from previous legislative practice in University Government made by the new legislation is in its establishment of a Faculty Council as the governing body. The Council, elected for three-year staggered terms from all the divisions of the University and embracing all ranks of professorship on a proportional basis, has assumed all the legislative functions of the General Faculty except the power to amend the "General Faculty Legislation." Consisting of ex-officio and elected members, the Council meets on the first Friday of each month during the academic year for the transaction of University business. Names of the present Council, together with the dates of their terms, appear on pages 11-12.

Growth of the University at Chapel Hill is depicted in enrollment figures. In the fall of 1920 students in residence numbered some 1,300; in 1930, 2,700; and in the fall of 1941 enrollment reached 4,108—up to then an all-time high. Because of the G. I. Bill and the general pressure for university and college education at the conclusion of the war, enrollment at Chapel Hill in 1948-1949 reached 7,603, the highest figure to date.

With expanded facilities in the Division of Health Affairs, the Library, the School of Business Administration, the Law School, and the Departments of Chemistry and English, the University has already embarked upon a new era of service to the state. With a bright past

and the opportunities for an even more brilliant future, the University of North Carolina looks ahead with confidence and challenge.*

Organization and Degrees

The University is organized into a General College (which gives the general academic work of the first two years), a College of Arts and Sciences, and twelve schools which have jurisdiction over degrees as shown below:

THE COLLEGE OF ARTS AND SCIENCES

Bachelor of Arts
Bachelor of Science in Chemistry
Bachelor of Science in Geology
Bachelor of Science in Physics
Bachelor of Science in Medical Technology
Bachelor of Science in Public Health Nursing
Bachelor of Science in Public Health
Bachelor of Science in Bacteriology
Bachelor of Science in Industrial Relations
Bachelor of Science in Mathematics
Bachelor of Science in Dentistry (with the School of Dentistry)
Bachelor of Arts and Laws (with the School of Law)
Bachelor of Science in Medicine (with the School of Medicine)
Bachelor of Music

THE SCHOOL OF BUSINESS ADMINISTRATION

Bachelor of Science in Business Administration
Bachelor of Science in Business Administration and Laws (with the School of Law)

THE SCHOOL OF EDUCATION

Bachelor of Arts in Education
Bachelor of Science in Science Teaching
Bachelor of Science in Health Education

THE SCHOOL OF JOURNALISM

Bachelor of Arts in Journalism

THE GRADUATE SCHOOL

Master of Arts
Master of Arts in Communications
Master of Arts in Creative Art

* For more detailed information concerning the University, see Kemp Plummer Battle's two-volume *History of the University of North Carolina*, published in 1907-12; Archibald Henderson's *The Campus of the First State University*, published in 1949; and R. D. W. Conner's two-volume *A Documentary History of the University of North Carolina, 1776-1799*, published in 1953.

Master of Science
Master of Science in Industrial Relations
Master of Science in Library Science
Master of Science in Oral Surgery
Master of Science in Orthodontics
Master of Science in Pedodontics
Master of Science in Personnel Administration
Master of Science in Public Health
Master of Science in Sanitary Engineering
Master of Education
Master of Social Work
Master of Music
Master of Public Health
Master of Regional Planning
Master of School Librarianship
Master of Business Administration
Doctor of Education
Doctor of Public Health
Doctor of Philosophy

THE SCHOOL OF LAW

Bachelor of Laws
Doctor of Law
Bachelor of Arts and Laws
(with the College of Arts and Sciences)
Bachelor of Science in Business Administration and Laws
(with the School of Business Administration)

THE SCHOOL OF LIBRARY SCIENCE

Bachelor of Science in Library Science

THE SCHOOL OF SOCIAL WORK

(see above)

DIVISION OF HEALTH AFFAIRS

THE SCHOOL OF MEDICINE

Bachelor of Science in Medicine (see above)
Doctor of Medicine

THE SCHOOL OF PUBLIC HEALTH

(see above)

THE SCHOOL OF DENTISTRY

Bachelor of Science in Dentistry (see above)
Bachelor of Science in Dental Hygiene
Doctor of Dental Surgery

THE SCHOOL OF PHARMACY

Bachelor of Science in Pharmacy

THE SCHOOL OF NURSING

Bachelor of Science in Nursing

SUMMER SESSION

Many of the regular courses as described in this catalogue are offered during the summer session with the same credit value. In addition to this, special courses, institutes, and workshops may be offered.

Department of Naval Science

A Naval Reserve Officers Training Corps Unit is maintained at the University of North Carolina under the provisions of Public Law No. 729, which authorizes such units at fifty-two colleges and universities throughout the United States.

Detailed information on the Naval Reserve Officers Training Corps Unit is in Part IV of this catalogue.

Department of Air Science

With the cooperation of the United States Air Force a course in Air Science has been established at the University. Under this program students may enroll in the Air Force Reserve Officers Training Corps for a four-year course of formal instruction in Air Science.

Detailed information on the Air Force Reserve Officers Training Corps Unit is in Part IV of this catalogue.

Admissions

Undergraduate students may be admitted to the General College, to the School of Pharmacy, to the College of Arts and Sciences, to the School of Business Administration, to the School of Education, to the School of Journalism, to the Dental Hygienist Program of the School of Dentistry, and to the School of Nursing. Application blanks for admission may be secured by writing the Director of Admissions. Applications along with complete records should be submitted at least fifteen days before the opening of the semester in which a student desires to enroll.

WOMEN STUDENTS: Women students are eligible to enter the following schools and curricula as freshmen: the School of Nursing, the School of Pharmacy, the Medical Technology curriculum, and the Dental Hygienist Program of the School of Dentistry. They are eligible to enter the College of Arts and Sciences, the School of Business Administration, the School of Education, and the School of Journalism on the same bases as men. Applications for Nursing

and Dental Hygiene are secured from the School of Nursing and the School of Dentistry; others, from the Director of Admissions. Women who are permanent and bona fide residents of the Chapel Hill township and those interested in Medical Technology are eligible for admission to the General College.

AGE: Each applicant must be sixteen years of age before or by the actual date of his first registration.

CHARACTER: Each applicant is required to furnish satisfactory evidence of good character.

HEALTH: Each new student before his arrival at the University is required to send to the University Physician a medical history properly completed by his physician. The health questionnaire is furnished by the Office of Admissions. Each registrant is also required to have a physical examination by the University Physician immediately before the period of his first registration. A former student who has been approved for readmission to the University and who has been away from the University for a year or more is required to submit a medical form and to be examined by the University Physician before registration.

ADMISSION TO FRESHMAN STANDING

Formal application for admission to freshman standing in the General College, the School of Nursing, the School of Pharmacy, or the Dental Hygiene Program may be made by a certificate showing graduation or its equivalent from an accredited high school with fifteen acceptable units and a satisfactory recommendation from the school last attended. For specific requirements for admission to the School of Nursing, to the School of Pharmacy, and to the Dental Hygiene Program, see the catalogues of those schools. Fifteen units are required for admission to the General College and the School of Pharmacy. Of these, ten and one-half must be in academic subjects and must include four in English, two in one foreign language, one and one-half in algebra, one in plane geometry, one in history of the United States, one in a natural science. The remaining four and one-half units are elective. Not more than four units in vocational subjects may be allowed toward admission. Specific foreign language requirements are found in the curricula outlined on pages 113-20. A student may be admitted with a deficiency of one-half unit in algebra, one unit in plane geometry, and two units in foreign language if he presents fifteen other acceptable units.

REMOVING DEFICIENCIES: The algebra deficiency may be removed by passing Mathematics 7, 11, or 15 here, or by a special examination given by the Department of Mathematics. A deficiency in plane

geometry may be removed by a special examination given by the Department of Mathematics, by a course offered by the University's Correspondence Division, or by summer work at an approved high school. A deficiency in a foreign language may be removed by passing the elementary part of the language here. It is very desirable that applicants with deficiencies try to clear these during the summer immediately preceding the fall opening at which they expect to matriculate. All entrance deficiencies must be removed before registration for the fifth semester in residence, not counting the summer session.

A graduate of a non-accredited high school, or a mature student who cannot meet the formal requirements, may qualify for admission by a special entrance examination.

The right is reserved to reject the application of any applicant who ranked in the lower half of his graduating class in high school. For cause, the Committee on Admissions may disapprove any application for admission.

ADMISSION OF NON-RESIDENTS: An applicant who is a non-resident of North Carolina may be required to supplement his application and transcript with a personal interview with a representative of the University, a written examination, and other information requested by the Committee on Admissions.

SPECIAL STUDENTS

Persons twenty-one years of age or over who cannot meet the requirements for admission as degree candidates, or others desiring to improve themselves professionally, may be admitted as special students, with the approval of the dean of the college concerned, to pursue a non-degree program. Application is made through the Director of Admissions, and satisfactory evidence of the student's ability to profit from the program desired must be furnished. The applicant should have an interview with the dean having supervision over the work to be taken.

Special students are on probation. Anyone enrolled in the University as a special student is required to carry at least fifteen hours of work unless he has permission of the dean concerned to carry less. They are required to pass all of their courses in order to be eligible to continue in the University.

ADMISSION TO THE COLLEGE OF ARTS AND SCIENCES AND TO THE SCHOOLS OF BUSINESS ADMINISTRATION, EDUCATION, AND JOURNALISM

Admission to the College of Arts and Sciences and to the Schools of Business Administration, Education, and Journalism is based upon the satisfactory completion of the first two years of college work given

in the General College of this University (pages 109-20) or its equivalent certified by another institution of recognized academic standing.

Satisfactory completion of the first two years of college work is interpreted to mean that a C average or better is achieved. Provisions may be made for the removal of a deficiency in the exact requirements of the first two years.

ADMISSION TO ADVANCED STANDING

A person seeking admission to the University on the basis of work at another recognized college or university is required to present a properly certified transcript of his record at that college or university at least fifteen days before the opening of the term in which the applicant desires to enroll. Application blanks may be secured by writing to the Director of Admissions. Each transfer student must submit a fee of $5.00. If the applicant is not accepted, the fee is returned; if he is accepted and enrolls as a student, the fee will be applied against the bill at his first registration; if he is accepted but does not enroll, the fee will be forfeited regardless of the reason involved.

Each transferred record will be evaluated in terms of requirements here. A transferring student is expected to present at least a C average on the work taken at other institutions. A course passed with the lowest passing grade at another institution does not give hours credit toward graduation, but may be used to satisfy a subject requirement in the University. No credit is allowed for work done at nonstandard or non-accredited colleges and universities unless a substantiating examination is passed here in each subject for which credit is sought. Any record submitted for advanced standing may be rejected in whole or in part, and validating examinations may be required in any or all subjects.

Applicants who have ever attended for any period of time a college or university are required to present properly certified transcripts or records of such attendance. It will be considered a violation of the honor code if in his application for admission any applicant makes a false statement with reference to previous college or university attendance in order to gain admission on the basis of a high school record alone.

The University is not an accrediting agency. It accepts the accreditation of the North Carolina State Department of Education in so far as high and preparatory schools and colleges (junior colleges or four-year institutions) are concerned. Outside of North Carolina the University depends upon the accreditation of the departments of education of the various states, upon the accreditation of the state universities or institutions of comparable rank, and upon the accreditation of regional accrediting agencies.

ADMISSION TO GRADUATE AND PROFESSIONAL SCHOOLS AND THE SUMMER SESSION

For the requirements for admission to the graduate and professional schools, the applicant should address his inquiry to the dean of the school in which he desires to enroll or consult the special catalogue of that school. For admission to the summer session only, the applicant should write to the Director of the Summer Session.

The College Year

The college year is divided into fall and spring semesters of approximately seventeen weeks each, and a summer session divided into two terms of about six weeks each. Currently the School of Medicine and the School of Dentistry are operating on the quarter system. There are recesses at Thanksgiving, Christmas, and Easter.

Religious Influence

The deep concern of the University for the religious life of the student is symbolized by the centrally located YMCA and YWCA building. Functioning in the heart of the campus and led by outstanding directors, these Christian Associations minister to the student body. In addition to their own programs and services, the YMCA and YWCA serve as channels of communication into the campus for the various denominational groups.

The churches of Chapel Hill, representing most of the denominations, provide an effective ministry to the students in their services of worship and weekly religious programs. The larger denominations also make available, through their state and national boards, the services of young pastors who work exclusively with students. These pastors, having official faculty recognition, work in close cooperation with the campus religious agencies.

The University has recently established a Department of Religion, offering courses in the history, literature, and interpretation of religion. All students thus have the opportunity to study with competent professors who can lead them to a better understanding and appreciation of their religious faith.

The Council on Religious Life, whose chairman is the Chancellor of the University, includes in its membership the deans of the colleges, chairmen of departments, college pastors, YMCA and YWCA directors, and other key persons on the campus. The Council, divided into four committees, serves to coordinate all religious activities, to provide counseling service for students, to supervise chapel and convocations, and to sponsor new approaches to religious emphasis among the students. The Department of Religion is a direct outgrowth of this Council's study and interest.

Physical Education

A thorough physical examination is given to students at the time of entrance. All students are classified on the basis of the examination, and an effort is made to adapt the program to the individual's particular needs.

Physical education is required of all undergraduate men two periods each week for the first two years; and of all undergraduate women two periods each week for the first three years. A two-semester-hour course in hygiene is required of all freshmen. Upperclassmen are offered the opportunity to major in the field of health and physical education.

Athletic sports and all kinds of physical activity are encouraged. The program of intercollegiate athletics includes a great variety of seasonal competitive games, with the idea of promoting maximum participation by members of the student body.

In addition to intercollegiate athletics the University fosters an unusually extensive program of intramural athletics. During the 1954-1955 school year the program involved 65 per cent of the male student body. Every effort is made to provide each interested student with the opportunity to participate in a healthful form of competition with his fellows and to learn teamwork and good sportsmanship.

Medical Attention

In order to provide proper medical attention for the student, the University employs five full-time physicians and maintains a well-appointed infirmary, with a modern X-ray unit under the direction of a full-time technician, and with a laboratory for diagnostic purposes under the direction of two full-time technicians. The infirmary is under the immediate supervision of the University Physician and is provided with ten experienced nurses who are under the general supervision of a head nurse. At the discretion of his attending physician a student may be admitted to its wards, and for such services as may be rendered by the staff no charges are made. But the student will be required to pay any additional service (consultation, special nurses, and operations), recommended by the attending physician and approved by the parent or guardian.

THE DIVISION OF STUDENT AFFAIRS

An integrated Division of Student Affairs was approved by the Board of Trustees on July 1, 1954. It is the purpose of the Division to coordinate and promote the work of all University services and organizations affecting the welfare of students—that is, all University relationships with students other than formal instruction.

The Dean of Student Affairs is the administrative head of the Division. It comprises the following offices and activities: Admissions; Records and Registration; Student Financial Aid, including scholarships; Student Activities, including the Student Union, the Y.M.C.A., and Y.W.C.A.; the Student Health Service; the Testing Service; special counseling services, including the Offices of Adviser to Foreign Students and Adviser to Veterans; the Office of the Dean of Women; and Housing.

Administrative Officers of Student Affairs

FREDERICK HENRY WEAVER, A.M., *Dean of Student Affairs*
RAYMOND LEWIS JEFFERIES, JR., B.S., *Assistant to the Dean of Student Affairs*
ROY WALTER HOLSTEN, A.B., *Director of Student Activities*
KATHERINE KENNEDY CARMICHAEL, Ph.D., *Dean of Women*
*IRMA E. EICHHORN, M.A., *Personal Adviser to Women*
LILA MILLS PONDER, A.B., *Assistant Director of Student Activities*
CLAUDE C. SHOTTS, B.D., *General Secretary, Y.M.C.A.*
JOHN DAESCHENER RIEBEL, B.D., *Associate Secretary, Y.M.C.A.*
KIRSTEN MILBRATH, M.A., *Director, Y.W.C.A.*
BETTY LANDON RAY, M.A., *Assistant Secretary, Y.W.C.A.*
JAMES C. WALLACE, LL.B., *Director, Graham Memorial*
LEE ROY WELLS ARMSTRONG, A.B., *Director of Admissions*
CHARLES CECIL BERNARD, A.M., *Assistant Director of Admissions*
GEORGE EDWARD FRENCH, A.B., *Assistant to the Director of Admissions*
STURGIS ELLENO LEAVITT, Ph.D., *Adviser to Foreign Students*
EDWARD MCGOWAN HEDGPETH, M.D., *University Physician*
JAMES E. WADSWORTH, A.M., *Director of Housing*
JOSEPH M. GALLOWAY, B.S., *Director, University Placement Service*
MARCELLA CAROLINE HARRER, A.B., *Assistant Director, University Placement Service*
EDWIN SIDNEY LANIER, *Director, Central Office of Records, and Director of Student Aid*
RAYMOND E. STRONG, A.B., *Assistant Director, Central Office of Records*
WILLIAM DECATUR PERRY, Ed.D., *Director, University Testing Service*
JAMES W. LITTLE, M.S., *Associate Director, University Testing Service*
FREDERICK CARLYLE SHEPARD, Ph.D., *Adviser to Veterans and Assistant Adviser to Foreign Students*

Administrative Board of Student Affairs

The General Faculty in its meeting of May 1, 1953, approved an amendment to the *Faculty Legislation* authorizing the Administrative Board of Student Affairs. The Board is composed of six members of the faculty appointed by the Chancellor. The Dean of Student Affairs presides over the meetings.

The term of office for the members of the Board is five years. Members may not succeed themselves immediately.

The function of the Board is: (1) to formulate, together with the Dean of Student Affairs, student welfare policies; (2) to advise the

* Resigned December 31, 1954.

Dean of Student Affairs in handling administrative matters; (3) to perform other duties that may be delegated to it.

The members of the Board, with expiration dates of terms, are:

FREDERICK HENRY WEAVER, *Chairman*

FREDERICK NEILL CLEAVELAND (1958)
HARRIETT LAURA HERRING (1955)
CLAIBORNE STRIBLING JONES (1957)
LOREN CAREY MACKINNEY (1956)
WILLIAM HARDMAN POTEAT (1959)
THOMAS MELVILLE STANBACK, JR. (1958)

STUDENT GOVERNMENT

Officers of the Student Body, 1954-1955

THOMAS CLAIBORNE CREASY, JR. ..... *President of the Student Body*
RALPH MARTIN JORDAN, II ..... *Vice-President of the Student Body*
GERALDINE SNIDER ..... *Secretary of the Student Body*
DONALD OWEN FOWLER ..... *Treasurer of the Student Body*

The student body of the University is self-governing, its functions being both disciplinary and administrative. These functions are exercised by executive, legislative, and judicial branches of representative government under a student constitution.

The executive department consists of the President of the Student Body, assisted by the Vice-President and the Secretary-Treasurer, all elected by the student body at large.

Legislative power is vested in:

Student Legislature. This body is the legislative branch of student government and is composed of fifty members elected annually. In addition to enacting nearly all the rules governing students here at the University, it has the responsibility for the annual budget of operations, for the supervision of certain committees, and for the proper performance of many constitutional duties.

Women's Residence Council. Composed of representatives elected by the women students, the Residence Council is responsible for drafting all rules governing coeds and for coordination of women's activities.

The judiciary comprises the Student Council, the Men's Council, the Women's Council, and special councils for dormitories and fraternities.

Student Council Members

WALTON KITCHIN JOYNER, *Chairman*

WILLIAM MORSE CALVERT
EDWARD HOLDER NELSON
GERALD CORBETT PARKER
ELEANOR ANN SAUNDERS
EDNA JACQUELYN STEED
CYNTHIA WOOD WARD
CHARLES PARKER WOLF

Men's Council Members

HERBERT HOWARD BROWNE, JR., *Chairman*

RALPH HILLIARD ASHWORTH
WAYNE GILLINGHAM BROWN
LYNN FAGE HARRIS CHANDLER
RICHARD AMIS COKER
JOHN GORDON FORESTER, JR.
LUTHER HARTWELL HODGES, JR.
CHARLES JACKSON KATZENSTEIN
CHARLES WILLIAM SHELTON
FRANK OGBURN YATES

Women's Council Members

NANCY JANE WHISNANT, *Chairman*

SONIA CAROLYN BERGAN
LOUISE INMAN COFFEY
BETSY LYNN GOODWIN
TINY MARGUERITE MORROW
MARY ANN SHANNONHOUSE
FLORENCE KENDRICK TOWNSEND
DOROTHY BARBARA WALKER
REGINA CAROL WEBSTER

The following three councils serve as governing bodies for specific campus groups:

Interdormitory Council. The functions of this agency are the regulation of living conditions in the men's dormitories and the maintenance of good living standards by dormitory residents.

Interfraternity Council. As the governing body for social fraternities in the University, this council attempts to further the ideals of fraternities through the unification of programs and action of the various chapters on the campus.

Panhellenic Council. This group is composed of representatives of the six campus national fraternities for women and the stray Greek organization. A clearing house for common problems and the regulating group for rush week, the Council also plans and directs various projects throughout the year.

No detailed code of rules is designed to govern student behavior. High standards of morality under the Honor System and of gentlemanly conduct under the Campus Code constitute the core of student responsibility and policy. The student councils, consisting entirely of student members, are the responsible courts in which violators of the Honor System and the Campus Code are tried. If a student is found guilty of violating the Honor System or the Campus Code, he may be suspended from the University for an indefinite period. Indefinite suspension is the established penalty, although there has been some variation in sentences from one student generation to another. Among the offences traditionally requiring suspension are cheating, stealing, lying, drunkenness, and gambling.

TESTING SERVICE

The facilities of the University Testing Service are available without charge to all University students to assist them in selecting an appropriate academic major and ultimate vocation. Students who request this service receive a comprehensive series of tests and are interviewed by experienced vocational counselors. An occupational information library is maintained for student use. Students who are having academic difficulties, who are in doubt as to a suitable academic major, or who have been unable to make satisfactory long-range vocational plans may find these services of particular value. Additional information on this service may be found in Part V of this catalogue.

PLACEMENT SERVICE

Through its placement facilities the University aids students and alumni in solving the problem of postgraduate employment. Registration is voluntary, and there is no charge for the service.

The Placement Service, while primarily concerned with employment opportunities for students and alumni in business, industry, and government, serves as a coordinating agency for all campus recruitment. The professional schools assist directly in the placement of their graduates.

Students should register for placement early in their senior year even though they have a job or may enter military service immediately following graduation. Registration with the Placement Service assures a complete and permanent personnel file, including a summary of college activities and confidential ratings from faculty members, which is available to employers upon request.

In addition, student-employer interviews are arranged on the campus throughout the year, and occupational information and company literature are available for student use. The Placement Service also makes available information regarding postgraduate scholarships, and temporary summer employment.

For prospective employers the Placement Service arranges interviews with students and faculty members, supplies a personnel file for students interviewed or recommended, and attempts to answer inquiries about unregistered alumni.

ADVISERS TO FOREIGN STUDENTS

To aid foreign students in the solution to problems which North American students do not encounter, there are two foreign student advisers: Sturgis E. Leavitt and F. Carlyle Shepard. Questions relating to foreign students are referred to these advisers.

UNIVERSITY ORGANIZATIONS

The organizations listed below offer opportunity for interested students to participate in activities which appeal to them and to become acquainted with others in the University having similar interests. Further information about them, and other organizations not listed, may be secured from the Dean of Student Affairs and the officers of the organizations.

Religion and Student Welfare

The Young Men's Christian Association, organized at the University in 1859, is a fellowship of Carolina students, faculty, and friends seeking to discover and practice the Christian way of life in all their relationships and activities. The program and service of the Association are developed by its active members on the basis of student needs. Membership is open to all men.

The Young Women's Christian Association is the religious, social, and welfare agency for women students. Its purpose is to unite students in a desire to realize a full and creative college life. Its office is in the Y.M.C.A. Building.

The Council of Religion includes in its members the presidents of all student religious organizations on the campus. It is interdenominational and interfaith in character and seeks to coordinate the work of the individual student religious organizations. It also studies the total religious needs of the campus, suggests ways of meeting these needs more adequately, and initiates proposals for strengthening the programs of its member organizations and advancing the religious work of the campus.

Debate and Discussion

The Senate of the Dialectic Literary Society and *The General Assembly of the Philanthropic Literary Society,* founded 1795, offer opportunity to participate in debates and discussion and to learn parliamentary procedure.

The Debate Council is an outgrowth of the debating societies on the campus. It is composed of students who are selected by the forensic squad, one member for each of the debating societies, and two faculty advisers.

The Carolina Forum cooperates with other organizations in procuring, coordinating, and presenting to the campus speakers of national and international note in government, labor, industry, education, etc.

The Carolina Political Union, a group of students and faculty members, holds regular forums for the discussion of current political and economic problems and brings to the campus speakers prominent in national and state political life.

Learned Societies

The Elisha Mitchell Scientific Society, an organization of students and faculty members interested in science, holds monthly meetings for the presentation and discussion of papers and maintains a journal which is widely circulated.

The Philological Club, meets monthly during the academic year for presentation of papers dealing with languages and literature in all fields. A journal founded by the club is widely circulated.

Music and Dramatic Art

Musical Organizations center their activities in Hill Hall, whose auditorium seats eight hundred and contains a four-manual concert organ. Hill Hall houses a collection of records, scores, books on music, and phonographs for audition purposes. Among organizations open to students and faculty are:

Glee Clubs for Men and Women
Symphony Orchestra
University Band
Chapel Hill Choral Club

The Carolina Playmakers, the University dramatic organization, gives ample opportunity to students for the writing, production, and acting of plays, as well as for the designing of scenery, stage settings, and lighting effects. For further information see Part V of this catalogue.

Sports and Sportsmanship

Intramural Activities provide a program of competitive sports and recreational activities for voluntary participation by students and faculty members. Competition is conducted within the fraternity division and the dormitory-independent division. A play-off between the division champions then determines the University championship. In addition, badminton, fencing, and dance clubs are sponsored annually by the Intramural Department. No additional fees are charged students for any phase of the intramural activities.

The Women's Athletic Association provides for every woman student opportunities for participation in many recreational activities and tournaments. Its program is organized and conducted by a stu-

dent cabinet of elected officers, appointed sorority and dormitory representatives, and appointed sports managers. Membership is open to all women students.

The University Club seeks to promote and maintain enthusiasm and good sportsmanship in all University events and contests by sponsoring pep rallies, entertaining visiting teams, and building school spirit.

Foreign Languages and Customs

Foreign Language Clubs, including *Le Cercle Français, El Club Español,* and *Delta Phi Alpha* (honorary German fraternity), meet regularly for the purpose of developing facility in understanding and speaking the foreign languages and of discussing topics relating to the life, customs, and literature of the countries where the languages are native.

The Cosmopolitan Club is an organization for the foreign students on campus. Its purpose is to provide a means by which these students can join together in social activities and various educational trips and programs.

Social and Miscellaneous

The Independent Coed Board, composed of representatives of dormitory and town groups of non-sorority women students, endeavors to provide opportunities for the development of social, civic, and intellectual interests among the women of the University who do not belong to sororities.

Town Girls Association is open to Chapel Hill residents. It provides an organization for local coeds and is aimed toward aiding the freshman women in the University. The group has a room set aside for its use on the second floor of the Y.M.C.A. Building.

The University Dance Committee has as its objective the role of host at University dances and the task of maintaining order at dances sponsored by campus organizations. It is composed of representatives from several campus organizations.

HONOR AND RECOGNITION SOCIETIES

Phi Beta Kappa, national scholarship fraternity founded at the College of William and Mary in 1776, has its Alpha of North Carolina Chapter here, established in 1904. Juniors and seniors who meet the requirements in scholastic achievement and character are invited to become members.

Sigma Xi, founded at Cornell University in 1886 for the purpose of encouraging original investigation in science, has a chapter here established in 1920. Membership is contingent upon evidence of excellence in research in one of the sciences. Advanced undergraduates and graduates who show promise in scientific research may be elected to associate membership, to be promoted to full membership later if deemed worthy.

Phi Eta Sigma, national freshman scholarship fraternity for men, was founded at the University of Illinois in 1923 to encourage and reward high scholastic attainment and thus promote good study habits early in college life. The chapter here was established in 1947. The freshman men who make at least half A's and the rest B's their first semester or their first two semesters are eligible for membership.

Beta Gamma Sigma, national scholastic honor society for students in commerce and business administration, was founded in 1913 by the union of three local societies at the universities of Wisconsin, California, and Illinois. Its Alpha of North Carolina Chapter was established here in 1933. Juniors and seniors in the School of Business Administration who achieve sufficiently high scholastic standing become eligible for membership.

Rho Chi was founded at the University of Michigan in 1922 to encourage high scholastic achievement and fellowship among students in pharmacy. Its Xi Chapter was established here in 1929, and students in the School of Pharmacy who qualify in scholarship, character, personality, and leadership are elected to membership.

Order of the Coif, honor society for men in schools of law, was founded at the University of Illinois in 1902. Its chapter here was established in 1928. Students who have sufficiently high scholastic standing at graduation in the School of Law are elected to membership.

Order of the Golden Fleece, senior honor society for men, was founded here in 1903. It selects each year from the men in the junior class, or above, those considered to possess the highest qualifications in character, ability, achievement, and leadership.

The Valkyries, senior honorary organization for women, recognizes and honors the women students most outstanding in character and achievement, the number selected each year not exceeding 2 per cent of the women enrolled. It was established here in 1941.

Order of the Grail was founded here in 1920 as an honorary service organization. Each year thirteen outstanding rising junior and senior men are honored with membership, the number almost evenly divided between fraternity and non-fraternity men. Its purpose is to

help provide social life to all students by sponsoring informal script dances, to award scholarships to needy and deserving students, and to serve the campus generally.

Order of the Old Well was founded here in 1949 for the purpose of recognizing and honoring campus service and accomplishment on a point basis. Whereas the Golden Fleece, the Valkyries, and the Grail select their honorees on an intangible appraisal basis, the Old Well honors those juniors and seniors, both men and women, who achieve at least a certain minimum number of points—all activities, such as scholarship, student government, athletics, forensics, publications, dramatics, music, being evaluated by a proper distribution of points.

Amphoterothen, an honorary organization of thirteen junior and senior men, was founded here in 1912 for the purpose of training in extemporaneous speaking. It became temporarily inactive in 1947 and was reactivated during the winter quarter of 1952.

Alpha Epsilon Delta, pre-medical honor society, was founded at the University of Alabama in 1926. Its Beta of North Carolina Chapter was established here in 1936. Its object is to encourage excellence in scholarship and to promote cooperation and common interests among the pre-medical students.

Alpha Kappa Delta, sociology recognition society for men, was founded at the University of Southern California in 1920 for the purpose of promoting scholarship and research among the advanced students in sociology. The Alpha of North Carolina Chapter was established here in 1931.

Alpha Phi Omega, national campus service fraternity, was founded at Lafayette College in 1925. Its purpose is to bind together college men in the fellowship of the Scout Oath and Law, to develop friendship, and to promote service to humanity. The Rho Chapter was established here in 1930.

Chi Delta Phi, national literary recognition society for women, was organized at the University of Tennessee in 1919. The Tau Chapter was established here in 1925. It attempts to associate interested women of literary ability in promoting the ideals of a liberal education.

Delta Phi Alpha, recognition society for students of German, was founded at Wofford College in 1929, its Beta Rho Chapter being established here in 1938. It aims to promote interest in the language, literature, and culture of German-speaking people.

Pi Delta Phi, recognition society for men and women students who have attained honor in the study of French, was founded at the

University of California in Berkeley in 1906 for the purpose of promoting the study of French and French culture in America. Its Beta Alpha Chapter was established here in 1952.

Pi Mu Epsilon, recognition society for students of mathematics, grew out of the Mathematics Club at Syracuse University. It was incorporated under the laws of New York in 1914. Its North Carolina Beta Chapter was established here in 1948. The purpose of the society is to promote interest in the study of undergraduate and graduate mathematics.

Pi Sigma Alpha, a national honor society for students in political science, established a chapter here in 1949. It was founded at the University of Texas in 1920. Eligibility for membership is based on high scholastic achievement in the subject.

Scabbard and Blade, national military society, has as its qualifications for membership good scholarship, leadership, initiative, and character. The organization was founded at the University of Wisconsin in 1904, the chapter was established here in 1949.

Sigma Gamma Epsilon, national honor society for students in the earth sciences, was founded at the University of Kansas in 1915. High scholarship and active interest in one of these fields are requirements for membership. The Alpha Alpha Chapter of the fraternity was established here in 1932.

PUBLICATIONS

The Publications Board of the University is the publishing agency for two student publications—*The Daily Tar Heel* and *The Yackety Yack*. Composed of two faculty members appointed by the Chancellor, four student members elected by the student body, and a representative of the Student Legislature, the Board has complete control over the financial policies of the publications under its jurisdiction. These publications are financed by appropriations from student fees and by advertising. The editor of each is elected by the student body, and he appoints his staff.

The Daily Tar Heel, published since 1893, is the student newspaper and appears six time a week. The paper is completely edited and prepared by students and gives opportunity for practical experience to students interested in the journalism and business phases of newspaper work.

The Yackety Yack is the yearbook. This publication presents in pictorial form a record of campus achievements and activities during the academic year.

Tarnation and the *Carolina Quarterly* are the other major publications. *Tarnation,* the campus humor magazine, appears four times during the academic year.

The Carolina Quarterly is an independent student publication, devoted to providing a literary outlet for young writers at the University. It is not under the jurisdiction of the Publications Board but is financed through subcriptions and advertising. A faculty committee composed of five professors in the field of the humanities serves as a permanent consulting board and selects the editor and business manager each year. The *Quarterly* appears each December, March, and May and features fiction, poetry, and articles by young writers both in and out of the University.

EXPENSES

The University reserves the right to make, with the approval of the proper authorities, changes in tuition and other fees at any time.

Tuition and Other Fees for Each Semester

Each student whose bona fide residence has not been established in North Carolina for at least the six months immediately preceding his first registration in the University must pay a higher rate of tuition than that paid by a legal resident of North Carolina. The residence of a minor is that of his parents or guardian. The residence of an adult remains with his parents unless he has independently set up one of his own.

Bona fide residence in North Carolina means that the student is not in the state primarily to attend the University and that his status as a resident has not been set up merely as a technical bar to the higher tuition charge. Mere ownership of property or payment of taxes apart from residence does not qualify one as a resident, nor may a student qualify by living in North Carolina the six months immediately preceding his first registration unless he continues so to live during the whole period of his stay at the University.

Students are presumed to know their correct residence status and to state the facts concerning it truthfully on their application and registration blanks. Students in doubt should state their cases in writing to the Chancellor, preferably in advance of registration. Students who misrepresent the facts of their residence status for the purpose of defrauding the University will be dealt with as are all other violators of the Honor System.

The tuition rates for students registered in the General College, College of Arts and Sciences, School of Education, School of Nursing,

Curriculum for Dental Hygienists, School of Business Administration, School of Journalism, School of Social Work, and Graduate School are as follows:

Residents of North Carolina, each semester	$ 75.00
Non-residents of North Carolina, each semester	180.00

In addition to the tuition charge, the fees payable at the beginning of each semester are listed as follows:

FEES:	*General College, Arts & Sciences, Journalism, Nursing, Education and Dental Hygiene*	*Business Administration*	*Social Work and Graduate*
Matriculation	$36.75	$36.75	$36.75
Student Activities	9.00	9.00	7.28
Materials		3.00	
Laundry Deposit	20.00	20.00	20.00

The matriculation fee covers use of physical education facilities, infirmary, library, cost of registration, and membership in the Athletic Association. Membership in the Athletic Association entitles students to become members of intercollegiate athletic squads with supplies and equipment furnished. Members are also entitled to the use of facilities, both as participant and spectator, limited by the capacity of the facility. The student activities fee covers general campus activities supported by all regular students. The reading and materials fee applies only to students registered in the School of Business Administration.

Laundry Deposit

Students are required to make an initial deposit of $20.00 at the beginning of each semester to cover laundry service at the University Laundry, and an additional deposit if the first is exhausted. Any amount not used will be refunded at the close of the spring semester.

Laboratory Fees

Each student taking a laboratory course must pay, in addition to tuition, a fee to help cover the cost of conducting laboratory experiments. The courses carrying laboratory or materials fees and the amounts are as follows:

Anatomy 41, 51	$ 3.00
Anatomy 101, 102, 104, 106	5.00
Anatomy 105a, 105b, 107a, 107b	7.50
Anthropology 41, 74, 122, 126, 127, 128, 130, 132, 220, 229	1.00
Anthropology 79	3.00
Art 44, 45, 46, 48, 49, 50, 55, 80, 81, 83, 84, 86, 87	12.00
Art 54, 85, 108, 109, 110, 111, 112, 113	15.00
Art 82, 250a, 250b, 250c, 252a, 252b, 252c, 253a, 253b, 253c	20.00
Art 104, 105, 106, 120, 121, 122	22.50

Art 240a, 240b, 241a, 241b, 242a, 242b, 244a, 244b	$ 30.00
Astronomy 31	4.00
Bacteriology 51, 55, 151	4.00
Bacteriology 106	5.00
Bacteriology 112	6.00
Bacteriology 101, 104, 115, 116, 117, 132	10.00
Bacteriology 120	12.00
Bacteriology 301, 302, 303	to be determined
Biochemistry 104	15.00
Biochemistry 101, 103, 123, 201, 204, 301, 302	10.00
Botany 1, 310, 320, 330, 350, 360 (2 hours)	2.00
Botany 41, 42, 101, 102, 103, 106, 114, 115, 154, 155, 211, 212, 251, 262, 310, 320, 330, 350, 360 (4 hours)	4.00
Botany 380, 390	4.00
Botany 45, 104, 105, 107, 221, 222	6.00
Botany 245, 246	10.00
Business Administration 71, 72, 134, 156, 159, 173, 175, 177, 179, 255, 274	3.00
Business Administration 133	6.00
Chemistry 4, 5	3.00
Chemistry 11, 12	4.50
Chemistry 83	5.00
Chemistry 51	7.50
Chemistry 31, 145, 146, 147, 154, 163, 164, 168c, 173	10.00
Chemistry 21, 43, 44	11.50
Chemistry 61, 62, 181, 182, 301, 341, 351, 361, 381	15.00
Composition Condition Laboratory	10.00
Dramatic Art 40	1.50
Dramatic Art 61, 63, 64, 65, 66, 67, 193, 200, 202	2.00
Dramatic Art 57, 58, 155, 156, 201	3.00
Dramatic Art 76, 77	4.00
Economics 170, 171, 172, 173	3.00
Education 71a, 135	2.00
Education 62, 64, 78, 79, 80, 82, 84s, 84f, 86, 88, 90, 92, 94 (per 10 to 15 hours)	20.00
English 40, 41, 44, 55, 56	1.50
Geography 131, 132, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160	2.00
Geography 38	3.00
Geography 118, 164	3.50
Geography 117, 171	5.00
Geology 127, 271, 272	2.00
Geology 111, 167	3.00
Geology 1, 41, 42, 122, 123, 166, 224, 225, 265, 281, 282, 284	3.50
Geology 103, 104, 105, 106, 107, 108, 109, 110, 144, 145, 168, 169, 221, 222, 241, 242, 244, 245, 247, 248, 261, 262, 285, 288	5.00
Geology 101, 117, 147	10.00
German 101x, 102x	15.00
Journalism 53, 54, 55, 57, 59, 62, 63, 67, 73	2.00
Journalism 80	5.00
Mathematics 41	1.00
Mathematics 51	4.00
Music 4, 41, 55, 56	1.00
Nursing 1, 2, 36, 38, 40, 42, 45, 65, 70	1.00

Nursing 50, 60, 80, 81, 86	$ 2.00
Nursing 41, 91	25.00
Nursing 35	6.00
Nursing 30, 31	10.00
Nursing 90	5.00
Pharmaceutical Chemistry 282	1.00
Pharmaceutical Chemistry 64, 65	5.00
Pharmaceutical Chemistry 61, 62, 171, 172, 241b, 242b, 271b, 272b, 391	15.00
Pharmacognosy 42, 45	6.00
Advanced Pharmacognosy 142	4.00
Advanced Macro-pharmacognosy 145	10.00
Advanced Micro-pharmacognosy 147	10.00
Research in Materia Medica and Pharmacognosy 391, 392, 393	10.00
Pharmacology 55	5.00
Pharmacology 171	15.00
Pharmacy 15	5.00
Pharmacy 35	7.50
Pharmacy 36, 71, 72	10.00
Pharmacy 91, 92	11.25
Pharmacy 191, 192, 391	15.00
Physical Education 221	5.00
Physics 45, 104, 105, 106, 107, 108	4.50
Physics 91, 92, 280	5.00
Physics 20, 24, 25, 34, 35	6.00
Physics 181, 182	10.00
Physics 51	15.00
Physiology 51, 141a, 301, 302, 303	5.00
Physiology 106	7.50
Physiology 142, 201, 202, 211, 212	10.00
Political Science 41, 42, 52, 53, 81, 82, 87, 101, 105, 121, 123, 126, 127, 132, 133, 134, 141, 142, 144, 145, 147, 151 155, 156, 157, 158, 162, 165, 166, 167, 175, 181, 185, 210, 221, 225, 231, 235, 241, 286, 301, 305, 311, 321, 331, 342, 343, 361	1.00
Psychology 130, 132, 225, 226, 230, 232	2.00
Psychology 24, 25, 151, 181, 201, 202, 205, 247, 249, 250, 341	3.00
Public Health 121, 135, 281	3.00
Public Health 165, 261	3.50
Public Health 131, 233, 234, 262, 272, 273	4.00
Public Health 163, 164	5.00
Public Health 232	8.00
Public Health 103ab, 361, 371, 381	10.00
Public Health 332	15.00
Public Health 17	20.00
Radio 76, 77, 87, 282	4.00
Radio 270, 271	3.00
Radio 200, 260, 261, 262, 263, 267, 268, 280, 281	5.00
Social Science 1, 2	1.50
Social Work 215-216, 218-219, 221-222, 224-225, 227-228	75.00
Sociology 51, 52, 75, 122, 128, 168, 181, 186, 190, 198, 208, 215, 218, 220, 229, 274	1.00
Sociology 191, 197, 253	3.00
Spanish 84	20.00

Zoology 209, 210	$ 5.00
Zoology 1	3.00
Zoology 41, 42, 109, 110, 111, 112, 206, 207, 212, 213, 215, 222	7.50
Zoology 330, 331, 332, 333, 334, 335, 336, 337, 338, 339 (per 3 hours)	5.00
Zoology 104, 105, 120, 220	10.00
Zoology 103	12.50

Laboratory Breakage Deposits

Students taking certain courses in chemistry, pharmacy, and medicine are required to make a deposit to cover breakage of equipment, use of more than normal expendable supplies and materials, and depreciation on unusual equipment. These deposits range from $7.00 to $15.00. The unused portion of the deposit is refunded at the end of the semester.

Application Fee

Each application for admission to advanced standing must be accompanied by a transcript evaluation fee of $5.00. If the applicant is not accepted the fee is returned; if he is accepted and enrolls as a student, the fee will be applied against his bill at his first registration; if he is accepted but chooses not to enroll as a student the fee will be forfeited.

Charges for Credit Obtained by Examination

Students who take examinations for credit for advanced standing will be charged $1.50 for each semester hour of credit secured by examination.

Delayed Registration

Any student registering later than the time appointed for his registration must pay an additional fee of $5.00. No appeal from the late registration charge will be granted, unless the delay results from circumstances clearly beyond the student's control. Such an appeal must be made in writing to the Chancellor, must show justification for the delay in registering, and must bear the approval of the dean of the division of the University in which the applicant is enrolled.

Transcripts of Record

One transcript will be furnished without charge. Additional transcripts will be furnished only upon payment of $1.00 for each copy.

Graduation Fee

The graduation fee is $10.00, payable when application for degree is made. A cap and gown rental fee of $3.00 is made to recipients of bachelors' degrees, $4.25 to recipients of masters' degrees, and $6.00 to recipients of doctors' degrees.

Refunds

A student withdrawing within the first week of any semester is charged only a registration fee of $7.00. If he withdraws after the first week, his bill will be prorated on the basis of one-tenth for each week (or part of a week) he attends. No refund will be made after the ninth week of any semester.

Payment of Bills

Bills for the fall semester are payable at the time of registration. Bills for the spring semester are payable at the Cashier's office on the first class day of the semester, and thereafter according to a schedule announced. Failure to pay or make the proper arrangement for payment results in the assessment of an extra fee of $5.00.

ROOM AND BOARD

Dormitory Accommodations for Men

Accommodations for approximately 3,000 men students are available in the University dormitories. In addition, many students find places for themselves in private homes or fraternity houses.

All rooms in the dormitories are completely furnished. Students will, however, provide their own pillows, bed linen (for single beds), blankets, and towels.

Rent for the scholastic year is $101.50, payable in advance as follows: fall semester, $50.75 due by September 1; spring semester, $50.75 due by February 1. Application for a room should be made to the University Cashier and should be accompanied by a deposit of $6.00.

Dormitory Accommodations for Women

Six dormitories provide excellent accommodations for 620 women students. Spencer, Smith, McIver, Alderman, and Carr Halls are for undergraduates, while Kenan Hall is reserved for graduate and professional students.

Women students not living in their own homes are required to reside in a dormitory unless permission to live elsewhere is granted by the Dean of Women. Ordinarily such permission is granted in exceptional cases only.

Application for a room should be made to the Dean of Women, and should be accompanied by a deposit of $6.00.

Rooms are rented upon the basis of the entire scholastic year. Payment is made in two installments, the first of which is due September first. The amount of each installment is determined by the annual rental price of the room and the length of each term.

Residents of Spencer Hall are required to board there. Residents of the women's buildings are given preference for vacancies in Spencer Hall dining room, but are privileged to board at any of the available boarding places.

All rooms are furnished. However, students are required to provide pillows, bed linen (for single beds), blankets, towels, and curtains.

The cost of room and board and details concerning payments may be found in the Handbook for Women Students or by correspondence with the Office of the Dean of Women.

Boarding Accommodations

The University operates for the benefit of the students the conveniently located Lenoir Hall Cafeteria and the Carolina Inn Cafeteria. Well-balanced menus are offered at standard prices.

SUMMARY OF ESTIMATED EXPENSES FOR THE COLLEGE YEAR OF THE AVERAGE MALE STUDENT WHO IS A RESIDENT OF NORTH CAROLINA

Board, estimated at $12 to $15 a week	$450.00
Dormitory room	101.50
*Tuition	150.00
Matriculation and students' fees, estimated for freshman year	91.50
Laundry deposit	40.00
Books and supplies, estimated for year	40.00
Laboratory fees, estimated for the average freshman	10.00
TOTAL FOR NORTH CAROLINA RESIDENT	$883.00

FINANCIAL AID

The income from a number of endowed scholarships is available for students who can show academic attainment along with definite financial need. The University also has certain funds which may be loaned to worthy students who can show definite need. In addition, there are part-time jobs involving various kinds of work which enable some students to earn a part of their expenses. Information about all these types of assistance may be obtained by writing the Director of Student Aid.

* Information concerning tuition for professional schools is available in the catalogues of the school of Law, Medicine, Dentistry, Pharmacy, Public Health, Nursing, and Library Science.

Fellowships and Scholarships

THE LEDOUX FELLOWSHIP IN CHEMISTRY. (Established in 1911 by Dr. Albert R. Ledoux.) The holder of this fellowship, which provides $300 annually, is expected to devote himself to research in chemistry.

THE GRAHAM KENAN FELLOWSHIP IN PHILOSOPHY. (Established in 1921 by Mrs. Graham Kenan.) This annual fellowship, established in memory of an alumnus and trustee of the University, is supported by the income from an endowment of $25,000.

THE WILLIAMS FELLOWSHIPS IN PHILOSOPHY. (Established in 1941.) Established by the will of Dr. Henry Horace Williams in honor of his mother, Mary Taylor Williams, and his wife, Bertha Colton Williams. The number, value, and recipients of these fellowships are decided each year by the professors in the Department of Philosophy of the University.

THE ERNEST H. ABERNETHY FELLOWSHIP IN SOUTHERN INDUSTRY. (Established in 1944.) The holder is required to do research in an industry of importance to the South and to prepare a thesis as the result of the study.

THE MOORE SCHOLARSHIPS. (Established in 1881.) Bartholomew Figures Moore, of Raleigh, North Carolina, bequeathed $10,000, the interest of which shall be devoted to paying the tuition of students. In 1940, James Moore, the son of the donor, raised the sum to $15,000.

THE FRANCIS J. SMITH SCHOLARSHIPS. (Established in 1885.) Miss Mary Ruffin Smith bequeathed to the University in memory of her brother, Dr. Francis Jones Smith, 1,460 acres of land, known as Jones' Grove, in Chatham County. The will provides that rents of the land or, if sold, the interest on the purchase money shall be used to pay the tuition of such needy students as the faculty shall appoint.

THE MARY ANN SMITH SCHOLARSHIPS. (Established in 1891.) Miss Mary Ann Smith bequeathed $37,000 for the foundation of scholarships, the number of scholarships to be determined by the amount of the income.

THE CAMERON SCHOLARSHIPS. (Established in 1892.) The heirs of Paul Carrington Cameron founded in his memory ten scholarships.

THE SPEIGHT SCHOLARSHIPS. (Established in 1892.) The late Mrs. Mary Shepherd Speight bequeathed $10,000 to the University. The income shall be used to pay the tuition of needy students; if tuition is ever made free, the income shall be used toward paying the salaries of professors.

THE MARTHA AND VARINA MASON SCHOLARSHIPS. (Established in 1894.) Mrs. Mary Elizabeth Mason bequeathed to the University a tract of about 800 acres of land (now known as Mason Farm) which had been purchased by her grandfather from the Earl of Granville, and her husband, Rev. James Pleasant Mason gave $1,000. The will stipulated that the endowment be named after their two daughters, Martha and Varina Mason, and the income used for the education of needy students.

THE WEIL SCHOLARSHIP. (Established in 1898.) A fund established by Mr. Henry Weil, of Goldsboro, North Carolina, furnishes one scholarship of the value of $75.

THE KENNETH MURCHISON SCHOLARSHIPS. (Established in 1904.) These scholarships were founded by Mrs. Shirley Carter, of Baltimore, Maryland, and the late Mrs. James Sprunt, of Wilmington, North Carolina, in memory of their father.

THE DONALD FAIRFAX RAY SCHOLARSHIP. (Established in 1919.) Mrs. N. W. Ray, of Fayetteville, North Carolina, established this scholarship in memory of her son, Donald Fairfax Ray, a graduate of the University, who died while in the service of his country.

THE HOLT SCHOLARSHIPS. (Established in 1920.) Four scholarships are maintained by the income from the Holt Loan Fund, established by Mr. Lawrence S. Holt, Jr. They are awarded to a member of each of the four classes in the academic department. Applications are considered after the opening of the University in the fall.

THE R. H. LEWIS SCHOLARSHIPS. Four scholarships, endowed by the University Gymnasium Association and called the R. H. Lewis Scholarships, are assigned by the President, and are to be used for tuition in the academic department.

THE GEORGE NEWBY TOMS SCHOLARSHIPS. (Established in 1926.) Mr. C. W. Toms, in memory of his son, George Newby Toms, granted the income from a fund of $10,000 as scholarships to worthy students, preference being given to students from Durham and Perquimans counties in North Carolina.

THE MARY K. BROWN MEMORIAL SCHOLARSHIP. (Established in 1931.) This scholarship, established by Mrs. James M. Brown in memory of her daughter, who for several years was secretary of the School of Commerce of the University, is awarded to a worthy student who is dependent upon his own efforts to secure an education.

THE GENERAL ROBERT RANSOM SCHOLARSHIP. This $200 scholarship, controlled by the United Daughters of the Confederacy in North

Carolina, is awarded each year to a lineal descendent of a Confederate veteran.

WILLIAM BLOUNT RODMAN SCHOLARSHIPS. Two scholarships assigned to students at the University from the memorial trust fund created by Colonel W. B. Rodman in memory of his father, William Blount Rodman. They are assigned by the State Superintendent of Public Instruction, Trustee of the fund.

THE MARK R. BRASWELL SCHOLARSHIPS. (Established in 1938.) In memory of Dr. Mark R. Braswell, Class of 1888, of Rocky Mount, North Carolina, a fund of $20,000 has been created for the endowment of scholarships valued at $200 each to be awarded annually to entering freshmen by the Braswell Scholarship Committee. Four scholarships are awarded annually for a tenure of one year each. The Committee, at its discretion, may extend the tenure, thus enabling the award to be made to a previous holder. The qualifications for award are character, all-round development, high scholastic attainment, and financial need.

THE HERBERT WORTH JACKSON MEMORIAL SCHOLARSHIPS. (Established in 1938.) Endowed by Mrs. Annie H. Jackson of Richmond, Virginia, as a memorial to her husband, Herbert Worth Jackson, of the Class of 1886, and supplemented in 1940 by an additional gift by Herbert Worth Jackson, Jr., the fund maintains two $2,000 scholarships, awarded to entering freshmen, who shall be native-born residents of North Carolina, nominated by their high schools or preparatory schools. One candidate only may be certified by each school to the University Scholarship Committee, which in turn shall select from all boys thus certified twenty, who shall come to Chapel Hill for interviews with the Jackson Scholarship Committee. The basis of selection shall be high scholastic rank, character, qualities of leadership, achievements, physical health and vigor, and promise of future distinction. A four-year award is made every two years: 1951, 1953, 1955, etc.

BERNARD-GRAIL SCHOLARSHIPS. (Established in 1938.) Scholarships of $150 each, maintained by interest from the Grail Loan Fund and net receipts from dances given from time to time by the Order of the Grail for the welfare of the entire student body. These scholarships were established in memory of Professor William Stanley Bernard who, as faculty adviser, was a source of inspiration and guidance to the Order of the Grail.

THE COUNCIL-MASSEY SCHOLARSHIP. (Established in 1941.) This scholarship was founded by C. Knox Massey of Durham, North Carolina, in honor of his father, C. W. Massey, University alumnus, civic

and educational leader of Durham, and C. T. Council, University trustee, manufacturer, civic and educational leader of Durham. Scholarships are awarded from time to time as the interest from a principal fund of $35,000 makes them possible.

THE H. V. WILSON SCHOLARSHIP FOR STUDIES IN MARINE BIOLOGY. (Established originally in 1937, supported subsequently from a fund established jointly by Dr. Henry V. Wilson, Jr., and former students and friends of Professor Wilson.) The holder of this $100 scholarship is expected to pursue graduate studies or research at the seacoast during the summer of award.

GEORGE W. GRAHAM MEMORIAL SCHOLARSHIP FUND. (Established in 1942.) Established by Mrs. George W. Graham, Sr., of Charlotte, North Carolina, as a memorial to her husband, Dr. George W. Graham, Class of 1858. The income only is to be used as scholarship awards. The recipient is to be designated by the University Scholarship Committee.

COLUMBUS HOWARD MORRISON SCHOLARSHIP. (Established in 1943.) Established by Fred W. Morrison of Washington, D. C., in memory of his father, Columbus Howard Morrison. Income from the investment of the scholarship endowment is to provide scholarships for promising young men and women who need financial assistance with preference given to those students from Cabarrus and Rowan counties.

THE MARVIN B. SMITH, JR., MEMORIAL SCHOLARSHIP. (Established in 1944.) Established and endowed by Mr. and Mrs. M. B. Smith, Sr., Miss Alyse Smith, and J. Harold Smith, of Burlington, North Carolina, as a memorial to their son and brother, Marvin B. Smith, Jr., of the Class of 1926. The fund maintains four scholarships, valued at $400 each and annually awarded to entering freshmen who plan to have their major work in the School of Business Administration. Applicants must be residents of North Carolina. The tenure of the scholarship is four years, provided the holder maintains high moral and scholastic standards. The basis of selection shall be high scholastic rank, character, promise of business leadership, and financial need.

FREDERICK H. KOCH PLAYWRITING SCHOLARSHIP. (Established in 1945.) Established jointly by the University of North Carolina and the friends of Professor Koch. Students of junior, senior, or graduate standing may apply and the choice of candidates, made upon the recommendation of the Department of Dramatic Art, is based on the applicant's talent in playwriting and on his need for financial assistance.

THE CHI PSI SCHOLARSHIP. (Established in 1946 by the Trustees of the Chi Psi Fraternity Educational Trust.) One scholarship, not to

exceed $200, to be awarded annually by the University Scholarship Committee to a regularly enrolled junior or senior student member of the Chi Psi Fraternity who has exhibited promise in scholarship and qualities of leadership.

THE ANDREW BERSHAK INTERFRATERNITY SCHOLARSHIP. (Established in 1948.) Established from contributions from University of North Carolina students who are members of various social fraternities as a memorial to Andrew Bershak, Class of 1938. The fund maintains a scholarship valued at $2,000 covering a four-year tenure ($500 a year) subject to maintenance of high standing by the recipient as a student at the University. The basis of selection shall be high scholastic rank, character, qualities of leadership, and financial need.

JOSEPHUS DANIELS SCHOLARSHIP. In accordance with the will of the late Josephus Daniels, funds have been provided to establish a scholarship valued at $500 a year for four years to be awarded to a North Carolina student. This award is made on the basis of scholarship, character and citizenship, and financial need.

THE WILLIAM ISAAC WITKIN SCHOLARSHIP FUND. The income from a fund of $10,000 to be used as scholarships to be awarded each year by the University Scholarship Committee in accordance with its usual regulations. This fund was established by Mr. Isaac Witkin, of New York City, in gratitude for and in commemoration of the safe return from war service of his son, William Isaac Witkin, Class of 1943.

THE CHARLIE JUSTICE SCHOLARSHIP. One scholarship maintained by interest from a fund of $10,000 raised by the Tar Heel Club of Durham, North Carolina, from friends and admirers of Charlie Justice, outstanding University athlete, Class of 1950. The scholarship is to be awarded each year by the University Scholarship Committee to a graduate of a North Carolina high school who has demonstrated outstanding ability as a football player and who can otherwise qualify for a University scholarship.

THE ERIC SCHWARZ MEMORIAL SCHOLARSHIP. This scholarship of $250 is awarded annually by the University Scholarship Committee as a memorial to Eric Schwarz, a freshman at the University in 1943-1944 who was killed in action in Germany, February 18, 1945. The scholarship is provided by his parents, Dr. and Mrs. Berthold T. D. Schwarz of Montclair, New Jersey. The award is made to an entering freshman with special talents in music.

THE JOHN MOTLEY MOREHEAD SCHOLARSHIPS. (Established in 1951 by the John Motley Morehead Foundation.) There are two classes of Morehead Scholarships: (1) For graduate, postgraduate, or pro-

fessional studies, graduate scholarships may be awarded only to applicants holding academic degrees from a university or college on the list of eligible institutions. (2) For undergraduate study leading to an academic degree, undergraduate scholarships may be awarded only to (a) graduates of junior colleges on the list of eligible institutions; (b) graduates of high schools and preparatory schools on the list of eligible institutions. The value of the scholarships has been fixed: for graduate scholarships, $1,500 per annum; for undergraduate scholarships, $1,250 per annum.

Scholarships will be awarded for one year only, but no scholarship will be awarded to any applicant for any course requiring more than one year unless the Trustees of the Foundation feel that it can and will be renewed until the course is completed, subject to the scholar's work, conduct, and general record. The tenure of a Morehead Scholarship is dependent upon the maintenance, by the scholar, of standards of work and conduct which, in the opinion of the Trustees, justify the scholarship.

ESCHEATS SCHOLARSHIPS. Receipts from escheated property and interest and earnings thereon have been set apart by the Trustees of the University in a special fund. The earnings from this fund are allocated to the institutions comprising the University of North Carolina for scholarships and loan funds to worthy and needy students who are residents of North Carolina.

STUDENT STORES GRANTS AND AWARDS. By action of the Board of Trustees of the University of North Carolina, May, 1952, profits from the Book Exchange and other student stores are set aside for scholarships and grants-in-aid.

With the exception of the Morehead Scholarships, Escheats Scholarships, and Student Stores Grants and Awards, these scholarships are not open to students in the schools of Law, Medicine, Dentistry, Library Science, Public Health, Social Work, and Nursing. For scholarships open to students in these schools, please see the special bulletins of the schools.

This list does not include certain annual contributions for scholarships, which are not on an endowment basis.

APPLICATION FOR SCHOLARSHIPS

All applications for scholarships must be filed in the Student Aid Office. The University Scholarship Committee makes the awards annually on or about May 15 and from time to time during the year. All applications must be in the regular form prescribed by the University. Forms are supplied on request to the Director of Student Aid.

Fee Tuition

Free tuition is given to residents of North Carolina who have physical handicaps. Information and application forms are available upon request to the Director of Vocational Rehabilitation Division, State Department of Public Instruction, Raleigh, North Carolina.

Loan Funds

THE DEEMS FUND. (Established in 1879.) A fund of $600 was established by the Reverend Charles Force Deems, D.D., late pastor of the Church of the Strangers, New York City, formerly a professor in the University, in memory of his son, Lieutenant Theodore Disosway Deems. In 1881, the fund was enlarged by a gift of $10,000 from Mr. William H. Vanderbilt.

THE MARTIN FUND. Interest from this fund, established by the bequest of Mr. Thomas D. Martin, of Raleigh, became available for loans during the session of 1908-1909.

THE HOGUE FUND. Interest from a fund of $4,000, established by the Reverend R. W. Hogue, of Baltimore, Maryland, is to be loaned to worthy students in the University.

THE HEWITT FUND. Interest from a fund of $18,700, established in 1916 by the bequest of Mr. Joseph Henry Hewitt, of Princess Anne County, Virginia, will be used for loans to "needy and deserving students" of the University.

THE HOLT FUND. The principal of a fund of $10,000, established by Mr. Lawrence S. Holt, Jr., of Burlington, North Carolina, is to be loaned to "worthy and needy students of the University." In addition, four scholarships in the University have been set up from the income of the fund.

THE VICTOR S. BRYANT FUND. The principal and interest of a fund of $7,500, established by the bequest of Mr. Victor S. Bryant, of Durham, North Carolina, will be used for loans to "worthy and needy young men" at the University.

THE SEELY FUND. A fund of $1,000 has been established by Mr. F. L. Seely, of Asheville, North Carolina, the principal of which is to be loaned to worthy and needy students, and the income therefrom to be added to the principal.

THE E. S. BLACKWOOD MEMORIAL LOAN FUND was created by bequest of Miss Katherine B. Blackwood, of New York City, and consists of $10,000 "to be used as a loan fund for needy students." This fund is administered in the same manner as the Deems Fund.

THE A. B. ANDREWS LOAN FUND. In May, 1925, the five children of the late Colonel A. B. Andrews (William J. Andrews, Class of 1891; Alexander B. Andrews, Class of 1893; Mrs. W. M. Marks; John H. Andrews, Class of 1897; and Graham H. Andrews, Class of 1903) established a fund of $2,500 of which the principal and interest are to be loaned to worthy students. This fund has been increased to $4,750 through subsequent gifts from Mr. Alexander B. Andrews, of Raleigh, North Carolina. The A. B. Andrews Loan Fund is administered as are other loan funds from the University and is established as a memorial to Colonel A. B. Andrews, a noted railroad builder in North Carolina and a Trustee of the University. It is requested by the donors that assistance from this fund be rendered first to students from those counties of North Carolina in which Colonel Andrews built railroads and second to students from those counties through which lines of the S.A.L., Norfolk-Southern, and Southern Railway systems run.

THE J. E. LEAR FUND. This fund of $5,244 became available in 1924. The fund was the result of installation work done by the senior class in electrical engineering under the supervision of Professor J. E. Lear.

THE JOSEPH E. POGUE LOAN FUND. This fund of $1,000 was presented to the University in April, 1930, by Mrs. Joseph E. Pogue as a memorial to her husband, the late Mr. Joseph E. Pogue. The principal and interest are to be loaned to deserving students.

THE EDMONDS LOAN FUND. This fund of a little over $800 has been set up by the Class of 1910 as a memorial to W. R. Edmonds, a member of that class.

GRAIL LOAN FUND. In June, 1930, the Order of the Grail, an undergraduate organization at the University of North Carolina, gave $1,400 to be known as the Grail Loan Fund. Additional gifts by the Order of the Grail and income from interest have increased the fund to $3,000. The principal of this fund is loaned to worthy students and the income is used to support the Bernard-Grail Scholarships.

THE ALDEN JOSEPH BLETHEN, III, MEMORIAL LENDING FUND. During the fall of 1930, Colonel C. B. Blethen, of Seattle, Washington, gave $2,000 to be known as the Alden Joseph Blethen, III, Memorial Lending Fund. This he did as a memorial to his son, A. J. Blethen, III, a member of the Class of 1934. The principal of the fund is to be loaned to deserving students.

THE ROCKINGHAM COUNTY ALUMNI LOAN FUND. In 1932, a fund of $713.32 was advanced by the Rockingham County Alumni Association. It is subject to recall by the Association.

THE RHO CHI LOAN FUND. The Xi Chapter of the Rho Chi Honorary Society has established a loan fund for deserving students of pharmacy.

THE CHARLES L. COON MEMORIAL LOAN FUND. A fund of $1,415 established by the administrators of the Charles L. Coon Memorial Loan Fund of Wilson, North Carolina, in September, 1934. The funds to be loaned to graduates of the Charles L. Coon High School of Wilson, North Carolina, upon the written approval of the school's superintendent and the chairman of the Board of Trustees.

THE JOHN B. WEAVER LOAN FUND. In 1937, a fund of $1,915 was established by Dr. William Jackson Weaver of Asheville, North Carolina, in memory of his father, John B. Weaver. It is administered under the same terms as the Deems Fund.

THE SHERMAN LOAN FUND. A fund established in 1939 by Dr. Joshua Sherman, Class of 1906, of Lancaster, Pennsylvania, and amounting at present to $1,419.28. The fund is available for student loans on the usual terms.

THE MAJOR DAVID C. AND MARTHA REEVES EDWARDS LOAN FUND. A fund established June 10, 1940, by a gift of $1,000 as a memorial to a father and mother of Alleghany County who educated four sons at the University. Donors have requested that assistance from this fund be renderd first to relatives, second to students from Alleghany County, and third to other students from North Carolina and states adjacent to North Carolina. In any case, however, the recipient of the loan must comply with all requirements imposed by the University Loan Fund Committee.

THE WINSTON-SALEM DRUGGISTS' LOAN FUND. Organized Druggists of Winston-Salem in 1942 gave $200 to be loaned to worthy students of pharmacy.

THE LOAN FUND OF THE CLASS OF 1942. The class gift of $350 in 1942 was set up as a loan fund under the usual terms for the administration of such funds.

DAVID ANDERSON ALLEN FUND. Established in 1945 by the wife (Jennie Ann Efird Allen) and children (Paul Haywood and Mary Ann) of David Anderson Allen, who graduated with the Class of 1938. Lieutenant Allen died in the service of his country on March 19, 1945, on the *U. S. S. Franklin.* The income from this fund is available as a loan or gift to deserving students at the University from Mecklenburg County, North Carolina.

THE DR. JOHN R. EDWARDS LOAN FUND. This fund was established in 1945 by a gift of $1,500 to the University by Dr. B. O. Edwards, of

Asheville, North Carolina, as a memorial to his son, the late Dr. John R. Edwards, a graduate of the University. This amount was later supplemented by an additional $1,500 from Dr. Edwards' daughter, Mrs. Foster Mackenzie, making the total fund $3,000. The principal and interest are to be loaned to deserving students, with preference given to North Carolina premedical students.

THE OLIVIA DUNN STUDENT LOAN FUND. A fund of approximately $25,000 established in 1946 at the bequest of Mary Olivia (Birdie) Dunn of Wake County as a memorial to her mother, Olivia Godwin Dunn. The fund is to be loaned to worthy students in accordance with the usual terms of the University Student Loan Funds.

THE SALLIE A. HUNT DENTAL MEMORIAL LOAN FUND. This fund was established in 1950 by a gift of $1,000 to the University from Dr. R. Fred Hunt of Rocky Mount, North Carolina, as a memorial to his mother, the late Sallie A. Hunt who was born in Nash County. The principal and interest are to be loaned to deserving North Carolina junior and senior (preferably senior) dental students.

The Emergency Student Loan Fund

In the winter and spring of 1932, the University faced a genuine emergency growing out of an announced reduction of state appropriations by 30 per cent, and the fact that between five hundred and seven hundred students were without funds with which to continue their schooling. When this situation was presented by President Graham, students ($2,057.14), faculty ($2,035.38), the people and community organizations of Chapel Hill ($970.22), various chapters of the D.A.R., U.D.C., and other committees of women, began building a student loan fund. Alumni and friends of the University everywhere contributed to raise the total of new loan resources to $109,000, known collectively as "The Emergency Student Loan Fund." The portions of that fund which for some appropriate reason were separately established are listed below. Unless otherwise indicated, the funds are loaned on the same terms as is the Deems Fund.

THE W. C. COKER LOAN FUND. A fund of $500 established February 2, 1932, by Dr. W. C. Coker, head of the Department of Botany of the University.

THE JESSIE KENAN WISE LOAN FUNDS. A loan fund of $25,000 established February 4, 1932, by Mrs. Jessie Kenan Wise, of Wilmington, North Carolina, and another loan fund of $47,000 in securities, the income from which may be loaned to students immediately, and the principal of which may be similarly used when made available through sale of the securities as opportunity for sale on favorable terms may arise.

THE BURTON CRAIGE LOAN FUND. A fund of $1,000 established February 6, 1932, by Mr. Burton Craige, class of 1897, of Winston-Salem, North Carolina.

THE BLAIR LOAN FUND. A fund of $500 established March 2, 1932, by the Honorable David H. Blair, class of 1898, and Mrs. David H. Blair, of Washington, D. C.

THE SARAH WATTS MORRISON LOAN FUND. A fund of $1,000 established March 4, 1932, by Mrs. Sarah Watts Morrison of Durham and Charlotte, North Carolina.

THE SARAH GRAHAM KENAN LOAN FUND. A fund of $1,000 established March 7, 1932, by Mrs. Sarah G. Kenan, of Wilmington, North Carolina, to be awarded according to the designation of the donor.

THE MILO M. PENDLETON LOAN FUND. A fund of $1,000 established March 15, 1932, by Mrs. Katharine Pendleton Arrington as a memorial to her brother, Milo M. Pendleton, of the Pharmacy Class of 1902.

THE RICHMOND, VIRGINIA, ALUMNI ASSOCIATION LOAN FUND. A fund of $320 given in 1932 by the organization named above with the request that it be set so as to receive annual additions from the donors.

THE EDRINGTON SPENCER PENN AND CHARLES ASHBY PENN, JR., LOAN FUND. A fund of $1,000 established April 14, 1932, by Mrs. Charles Ashby Penn, of Reidsville, North Carolina.

THE C. W. TOMS LOAN FUND. A fund of $1,000 established May 19, 1932, by Mr. C. W. Toms, Class of 1889, of New York City, in memory of his son, the late George Newby Toms, Class of 1928.

THE MARGARET MCCAULL CARMICHAEL LOAN FUND. On May 25, 1932, a fund of $1,000 was established by W. D. Carmichael, Class of 1897.

THE ANNIE LOUISE WATTS HILL LOAN FUND. A fund of $1,000 established by Mr. John Sprunt Hill, of Durham, North Carolina, on June 4, 1932, as a memorial to his wife.

THE GEORGE BASLEY HISS LOAN FUND. A fund of $10,000 established in 1932 by Mrs. Bertha T. Hiss, of Charlotte, North Carolina, in memory of her husband, George Basley Hiss.

THE WILLIAM T. HOLLAND MEMORIAL LOAN FUND. Income and principal from this fund of $37,289.19 established in 1954 by Mrs. Byrd T. Holland of Charlotte, North Carolina, as a memorial to her husband, William T. Holland, to be used for loans to needy and deserving boys attending the University. Students majoring in Geology shall be given first consideration.

THE JESSE KNIGHT DOZIER LOAN FUND. A fund of $100,000 established in 1954 by bequest of Dr. Jesse Knight Dozier, Class of 1899, a native of Tarboro, North Carolina, and later a resident of Pasadena, California. The principal and income are to be used for a student loan fund at the University.

APPLICATION FOR LOANS

Applications for loans will be considered when made in person by students registered in the University. The funds are limited in amount and are loaned only on the security of two approved signatures and at a low rate of interest.

Self-Help Work

There are jobs available for students wishing to earn part of their expenses. Students work in the libraries, dining halls, Graham Memorial, Book Exchange, dormitories, Woollen Gymnasium, Kenan Stadium, Buildings Department, and other University divisions and offices. All jobs are assigned by the Self-Help Committee, solely on the bases of scholastic merit, financial need, and good character. Holders of jobs are required to maintain a scholastic average of at least C from year to year. Jobs off the campus, in Chapel Hill homes and in business firms, are not assigned by any committee or division of the University. Such work is secured by the efforts of the student, the Director of Student Aid helping wherever possible. All inquiries about an application for work should be mailed to the Director of Student Aid before May 15, after which the jobs are assigned.

It is difficult for first-year students to do self-help work and carry successfully a full schedule of academic work. They are urged to devote full time, if possible, to their studies and related activities.

The Committee assigns the available jobs to those who, in its judgment, are most urgently in need of financial aid and who show high scholastic achievement. Each applicant is notified by personal letter of the Committee's decision on his application.

MEDALS AND PRIZES

THE MANGUM MEDAL IN ORATORY. (Established in 1878.) A gold medal founded by the Misses Martha ("Pattie") Person and Mary Sutherland Mangum, late of Orange County, in memory of their father, Willie Person Mangum, Class of 1815, is continued by the two direct lines of his descendants as follows: Mr. Willie P. Mangum Turner of Winston-Salem, North Carolina, Class of 1900, and Mr. Willie P. Mangum Weeks of Washington, D. C., Class of 1915. This

medal is awarded to that member of the senior class who, in the opinion of a group of judges, gives the most excellent oration at an annual oratorical contest.

THE EBEN ALEXANDER PRIZE IN GREEK. (Established in 1887.) A prize of $25 is offered annually to that member of the sophomore class who shall present the best rendering into English of selected passages of Greek not previously read.

THE BRYAN PRIZE IN POLITICAL SCIENCE. (Established in 1903.) A prize will be given annually for the best thesis in political science. The fund was established by the late William Jennings Bryan.

THE ARCHIBALD HENDERSON PRIZE IN MATHEMATICS, formerly THE WILLIAM CAIN PRIZE. (Established in 1908.) A gold medal is given annually to the undergraduate student judged by the Department of Mathematics as having demonstrated a high order of mathematical ability and shown the greatest promise of originality in the field.

THE MILDRED WILLIAMS BUCHAN PRIZE. (Established in 1920.) A fund of $1,000 was given by Mr. Edward Robertson Buchan in memory of his wife. The income of this fund is to provide a prize in the Department of Philosophy.

THE PATTERSON MEDAL. (Established in 1924.) A gold medal is offered annually by Dr. Joseph F. Patterson in memory of his brother, John Durant Patterson. This medal is awarded for general excellence in athletics to a student selected by a special committee.

CHI OMEGA PRIZE IN SOCIOLOGY. A prize of $25 is awarded by the local chapter of the Chi Omega Fraternity to the undergraduate woman student who writes the best paper on some subject in the field of sociology or public administration. The subject will be submitted to the undergraduate student body some time before February 15. Papers must be handed in by May 15. The Department of Sociology will select the subject and judge the papers. The prize will be awarded at commencement.

THE BUXTON WILLIAMS HUNTER MEDAL IN PHARMACY. A gold medal is offered annually by Mr. D. R. Davis, of Williamston, in honor of his uncle, Mr. Buxton Williams Hunter, of New Bern, and is awarded to that student who has shown outstanding qualities of leadership and scholarship and who has done conspicuous work in the Student Branch of the N.C.P.A.

THE LEHN AND FINK GOLD MEDAL IN PHARMACY. (Established in 1924.) This medal is given annually by Lehn and Fink of New York

City, and is awarded to the student in the graduating class making the highest average during the four years of study.

THE E. CARRINGTON SMITH AWARDS. (Established in 1928.) A trophy is presented annually in football and basketball to the most valuable player possessing qualities of leadership, scholarship and sportsmanship. The recipient is elected by the squad members in the respective sports.

THE ALGERNON SYDNEY SULLIVAN AWARD. (Established in 1928.) To be bestowed annually upon one man and one woman of the graduating class who have best demonstrated an attitude of unselfish interest in the welfare of their fellowmen. The award shall not be based upon scholastic, athletic, or other collegiate attainments.

THE DELTA SIGMA PI AWARD. (Established in 1931.) This award is given annually to the senior in the School of Business Administration who has the highest academic average.

THE ROLAND HOLT CUP IN PLAYWRITING. (Established in 1936 by Mrs. Roland Holt in memory of her husband.) This award is made each year by the Department of Dramatic Art for excellence in playwriting.

THE DICK JAMERSON SWIMMING AWARD. (Established in 1940.) This award is made annually to the freshman and senior who demonstrates excellence in scholarship, leadership, swimming and team morale.

THE JOHN JOHNSTON PARKER, JR., MEDAL FOR UNIQUE LEADERSHIP IN STUDENT GOVERNMENT. (Established in 1941.) This medal is given annually by Judge and Mrs. John J. Parker in memory of their son, John Johnston Parker, Jr., Class of 1937, who rendered distinguished and sacrificial leadership as President of the Student Council in one of the critical years in the history of Student Government. This medal is awarded by a special committee appointed by the President of the University to that member of the graduating class who has demonstrated most clearly the highest qualities of leadership in perpetuating the spirit of honor and the process of student self-government.

THE PHI BETA KAPPA AWARD. (Established in 1941.) An award amounting to $150 is given annually by the local Chapter of the Phi Beta Kappa National Honorary Fraternity to that member of the rising junior class (eligible for self-help work) who has made the highest scholastic average during his freshman and sophomore years.

THE ERNEST H. ABERNETHY PRIZE IN STUDENT PUBLICATION WORK. Mr. Ernest H. Abernethy, 1922, of Atlanta, Georgia, established in

1941 an annual award of a plaque and $50 in cash, which is to be presented to the student who is adjudged by a committee to have done the most distinctive work during the current year in the field of student publications.

THE FOY ROBERSON, JR., MEDAL. A gold medal is offered by Dr. and Mrs. Foy Roberson in memory of their son, Foy, Jr., Class of 1940, varsity basketball 1939 and 1940; Second Lieutenant, Army Air Corps; killed in collision at sea, December, 1941. Awarded annually for the chief contribution to team morale in basketball.

THE JOSEPHUS DANIELS SCHOLARSHIP MEDAL. (Established in 1941.) A gift from the family of the Honorable Josephus Daniels to be invested and the income used to provide annually the Josephus Daniels Scholarship Medal for the University of North Carolina unit of the Naval Reserve Officers Training Corps.

THE VALKYRIE CUP AWARD. (Established in 1941.) The Valkyries are given funds annually from the Women's Residence Council to make this award available to the senior woman adjudged most outstanding on the University campus.

THE FRANCIS P. VENABLE AWARD. (This was originally the Alpha Chi Sigma Prize in Chemistry, established in 1942.) A medal given annually by the local chapter of Alpha Chi Sigma Fraternity to the undergraduate student of chemistry selected by the faculty as best exemplifying high scholarship, leadership and personality.

THE WILLIAM CHAMBERS COKER AWARD IN SCIENCE. (Established in 1948.) A sum of $50 is awarded annually by the Elisha Mitchell Scientific Society to the graduate student whose thesis or dissertation shall be adjudged the best of those submitted for a graduate degree in the Science Division.

THE ALPHA KAPPA PSI SCHOLARSHIP KEY. Alpha Tau Chapter of Alpha Kappa Psi, a professional fraternity in commerce, awards annually the Alpha Kappa Psi scholarship key to the male senior student pursuing a degree in the School of Business Administration who has attained the highest scholastic average for three years of collegiate work in this University.

THE E. J. EVANS TRACK AWARD. (Established in 1949.) A permanent gold cup honoring the outstanding senior track athlete has been established by Mr. E. J. Evans, of Durham, North Carolina, and is kept in the University's trophy case. A special plaque is given each year to the student winning this honor.

THE JOHN BISHOP MEDAL. (Established in 1952.) This medal was established as a Revolutionary Memorial in honor of John Bishop (1740-1815), who served from Halifax County, North Carolina, in the Continental Army. It has been made available by a gift from one of his direct descendents of the fifth generation, Mr. Charles B. Bishop, Class of 1925, of New York City, and is to be given annually to a member of the N.R.O.T.C. of the sophomore or junior class for efficiency in marksmanship.

THE JESSIE MAI PETTY AWARD. (Established in 1953.) Mr. James B. Petty, Class of 1943, of Gastonia, North Carolina, established this award in honor of his mother. It consists of a book, or set of books, and a cash donation, the total value at present being set at $100. It is presented annually to the junior who at the time of his election to Phi Beta Kappa has the highest scholastic average in his class.

THE BENJAMIN SOLOMON MEMORIAL AWARD. (Established in 1953.) A grant-in-aid and a trophy is offered annually by Mr. and Mrs. Sam Planer, of Gastonia, North Carolina, to the member of the varsity wrestling team who has best demonstrated the qualities of character and personality which are developed by his participation in wrestling.

THE JANE CRAIGE GRAY MEMORIAL AWARD. (Established in 1954.) This award is to be presented annually by Beta Chi Chapter of Kappa Delta, recognizing that woman of the junior class who has proved herself most outstanding in character, scholarship and leadership. The award was established in memory of Jane Craige Gray.

REGULATIONS

Special Notice to Students

This catalogue, issued in the spring of each year, is intended to give such a description of the work of the University and such a digest of its rules as are needed by the students. Neither the courses announced nor the rules given are valid beyond the succeeding year, for before the end of the succeeding year a new catalogue will have been issued superseding all previous catalogues. Ordinarily a student may expect to be allowed to secure a degree in accordance with the requirements of the curriculum laid down in the catalogue in force when he first entered the University, or in any one subsequent catalogue published while he is a student; but the faculty reserves the right to make changes in curricula, as in rules, at any time when in its judgment such changes are for the best interests of the students and the University.

Registration

All students are expected to register in accordance with the plan of registration established for the current year. All students registering here for the first time will report for physical examination to the Infirmary and present at registration a Permit to Register card which includes clearance by the University Physician. Students failing to present this clearance at registration are liable to an extra charge of $5.00.

Registration for credit for any course is limited to the first four full days of instruction of a semester unless the late registration is approved by the instructor concerned and the dean.

Payment of Bills

Bills for the fall and spring semesters and the summer session are payable at the time of registration or at the Cashier's office on the first class day of the semester or summer session and thereafter according to a schedule announced. Failure to pay or to make proper arrangements for payment results in the assessment of an extra fee of $5.00.

Delayed Registration

Any student registering later than the time appointed for his registration must pay $5.00 as an additional fee for delayed registration. *No appeal from the imposition of the late registration charge of five dollars will be granted unless the delay results from circumstances clearly beyond the student's control.* Such appeals must be made in writing to the Chancellor, must show justification for the delay in registering, and must bear the approval of the dean of the division of the University in which the appellant is enrolled.

Arrangement of Courses

Attention is called to the reduction of credit for freshman and sophomore courses when taken late in the student's career. Only half credit is allowed if a required freshman course is taken after a student begins his junior year or if a required sophomore course is taken after he begins his senior year.

No student while in the General College will be allowed to take fewer than five full courses a semester, unless he has the permission of his dean. Students who have a scholastic average of "C" in the preceding semester may take six courses representing not more than twenty semester hours. For six courses representing more than twenty semester hours, a scholastic average of "B" in the preceding semester is required. A student may not register for seven courses.

For students in the College of Arts and Sciences, School of Business Administration, School of Education and the School of Journalism, a student must carry fifteen hours of work in order to be regularly enrolled. He may carry more than seventeen semester hours of work only if his scholastic average for the preceding semester was "C" (1.0). In order to carry more than eighteen semester hours of work his scholastic average for the preceding semester must be "B" (2.0). In no case can he receive credit for more than twenty semester hours in a semester.

A student desiring to change his courses must make written application, which, after approval by his faculty adviser, will be considered by the dean. The written permission of the dean must be presented at registration.

The listing of a course in the catalogue does not obligate the University to give the course in any particular year.

Changes in registration are limited to the first four full days of instruction in a semester.

There is a requirement that the full work of the last year shall be done in residence at this University.

Assignment of Rooms

The rooms in the University dormitories and accommodations for families are assigned to men students by the Director of Housing. Women students are assigned housing accommodations by the Office of the Dean of Women.

The University reserves the right to require any student whom, for any reason, it considers an undesirable tenant to vacate a room in the University dormitories.

In order to retain his room for the next scholastic year, each student must file with the Cashier before April 20 an application and a deposit of $6.00 as an option. The rooms thus applied for will be retained until September 1, when first payment of rent is due. The option deposit will be forfeited in case the applicant does not himself pay the rent, or make proper arrangements to pay, and occupy the room. Rooms not applied for or made vacant by failure to pay at the proper date will be assigned in the order of application.

Bills are forwarded to women students for room rent early in the semester. Women students are responsible for room rent for a semester once a room assignment is made.

The right to occupy a room is not transferable and terminates with the expiration of the lease. Any attempt on the part of an occupant of a room to sell or transfer his right to occupancy will be considered a fraudulent transaction and will result in forfeiture of the room by the new lessee.

The occupant of a room will be held directly responsible for any damage done to his room or to its furniture.

No pets shall be kept in the University dormitories and Victory Village. Breach of this regulation leads to forfeiture of the place of residence.

Conduct

By order of the Board of Trustees the faculty is directed to discipline or dismiss from the University any student who is known to engage in drinking intoxicating liquors, gambling, hazing in any form (presence at hazing is regarded as participation) , or to be guilty of dissolute conduct. See also Student Government, pages 65-66.

Students persistently neglectful of duty, or addicted to boisterous conduct or rowdyism, may be required to leave the University.

Students, unless bona fide residents of Chapel Hill, when suspended from the University for disciplinary reasons, must leave the campus and Chapel Hill within forty-eight hours or forfeit the right to readmission at any time.

Attendance

Regular attendance at class is a student obligation—an obligation to himself and to the state of North Carolina. It is his obligation to know the rules governing class attendance, to know his attendance status in all classes at all times, and to transmit from the Central Office of Records to his instructors official notice of excuse from class.

A student will be reported to the dean of the school or college in which he is registered when he has been absent without excuse three times in a single class. An absence during the two-day period immediately before or immediately after University holidays will be counted two absences. Unexcused absences from laboratory or from class on the day of a scheduled quiz or examination will result in failure of the work missed.

When a student has three unexcused absences in a single class the dean of his school or college will notify him that he is on attendance probation for the course. Four unexcused absences will result in the student's being dropped from the course by his dean with the grade of "F".

Absences from class with cause may be excused only by the University Physician or the dean of the school or college in which the student is registered. Request for excuse from absence, except absences excused by the University Physician, will be made to the dean of the school or college in which the student is registered. The dean will forward authorizations for excuses to the Central Office of Records on a form provided by the latter office, and the Central Office of Rec-

ords will issue to the student an official excuse for presentation to his instructors. Instructors will accept only excuses issued in this way. Excuses for absence may not be granted later than one week after the student's return to class.

No student may receive credit for any course unless he has attended at least seventy-five per cent of the meetings of the course, except by permission of the administrative board of the school or college concerned. A student who has not met this minimum attendance requirement may not take the final examination in the course without the consent of the instructor concerned and the approval of the dean of the school or college in which he is registered.

A student who is on the honor roll is exempt from regulations governing class attendance except those pertaining to absence from laboratory or quizzes and examinations and to minimum seventy-five per cent attendance in all courses.

The faculty is responsible for enforcement of attendance regulations. In order to discharge this responsibility properly, members of the faculty will: (a) explain the attendance regulations during the first week of every class; (b) keep an accurate daily record of attendance; (c) report promptly to the dean of the school or college in which the student is registered the name of any student who has been absent three times without excuse; (d) report promptly to the dean of the school or college in which the student is registered the name of any student on attendance probation who is absent without excuse; and (e) accept only excuses issued by the Central Office of Records.

The grade of a student who quits a course without the permission of the dean of his school or college is recorded officially as "F".

The grade of a student who drops or is dropped for other than disciplinary reasons from a course in which he is failing at that time is recorded as an "F" unless, in the judgment of his dean, his failure was caused by circumstances beyond his control.

The dean of the school or college in which the student is registered will determine whether a student may remain in residence after having been dropped from or having quit one or more courses.

Examinations

COMPREHENSIVE EXAMINATIONS

Only a student who is a candidate for honors is now required to take a comprehensive examination. This examination is in the field of the student's major.

QUIZZES

By action of the faculty, quizzes are not to be given during the last six days of any semester.

SPECIAL EXAMINATIONS

Special examinations for the removal of conditions and for advanced standing will be given in 1955 as shown below:

Monday, September 12

8:30 A.M.
Economics
Romance Languages
Zoology

2:00 P.M.
Geology and Geography
Psychology
Art
Physical Education

11:00 A.M.
Education
English
German

4:30 P.M.
Comparative Literature
Greek
Physics
Sociology

Tuesday, September 13

8:30 A.M.
Botany
Latin
Journalism

2:00 P.M.
Music
History
Mathematics
Political Science

11:00 A.M.
Chemistry
Business Administration
Philosophy
Dramatic Art

4:30 P.M.
Any examinations made necessary by conflicts.

A special examination may be taken as scheduled above by a student who has received the condition grade *Cond.* A student may take the examination with the class in the same subject at any regular term examination within one calendar year after he has made the grade of Cond., provided he has no conflict with a course regularly taken by him in the term. A senior who makes a grade of Cond. in his last term of residence is allowed to take a special examination for removal of the Cond. by special arrangement between the instructor and the dean concerned. The grade Cond. becomes F if the student fails to pass a re-examination within one calendar year.

Special examinations for students who have been officially excused from regular examinations because of sickness, or who have been absent for some necessary cause and are therefore excused, may be held at suitable times fixed by the Central Office of Records and the instructors concerned. Such examinations must be taken within one calendar year of the date of absence, except for graduate students who may remove grade Abs. within one calendar year from the date of their next registration at the University.

To be entitled to take a special examination within a term, at the September period, or at a regular semester examination period, the student is required to file a written request in the Central Office of Records before the time for the examination.

Papers handed in at a special examination by students who have been officially excused from the regular examination will be graded by the usual system; all others will be marked "passed" or "failed."

REGULAR FINAL EXAMINATIONS

Regular written examinations are required at the end of each term in all courses except those whose nature makes written examinations unnecessary. *Approval of such exceptions must be secured in advance from the Chairman of the Faculty.*

Papers written in final examinations are not to be carried away from Chapel Hill to be graded.

Final examinations except in laboratory practice may not be held at any time other than those specified in the preceding regulations.

No examinations may be held later than 7:00 P.M.

All examinations must be held in Chapel Hill.

In exceptional cases arrangements can be made to take examinations *in absentia.* There is a fee of $10.00 for each such examination. Applications for examinations *in absentia* should be directed to the dean of the school in which the student is registered.

Examinations should be limited to a period of three hours. In courses in which a considerable portion of the examination is of a practical nature the instructor may extend the time at his discretion.

The examination schedule at the end of each semester having once been fixed cannot be changed, and the examination must be held at the time shown on the schedule.

No students other than the following may take the examination in any course: (1) regularly enrolled members of the class whose names have been reported from the Central Office of Records to the instructor as having registered in due form for the course; and (2) those whose names have been reported from the Central Office of Records as having the right to take special examinations in that course.

Any student absent from an examination without an official excuse, from the University Physician or his dean, or present and failing to submit examination papers is reported absent. This mark is equivalent in every respect to grade F or failure and is so recorded in the Central Office of Records. Authorized excuses from an examination are issued by the Central Office of Records.

Each student is required to subscribe his name to the following pledge or its equivalent on every paper: "I hereby certify that during

this examination I have neither given nor received aid." The instructor will not report a grade for any student whose examination paper lacks this pledge.

Standing

After the close of each semester, reports of the standing of all students in all their studies are sent to parents or guardians. The reports are based upon the following system of marking:

UNDERGRADUATE AND PROFESSIONAL	GRADUATE
A—Excellent	P—Passed
B—Good	F—Failed
C—Fair	Inc.—Work Incomplete
D—Passed	Abs.—Absent from Examination
F—Failed	
Cond.—Conditioned	
Inc.—Work Incomplete	
Abs.—Absent from Examination	

The grade Inc. may be converted into one of the other grades by completing within a period of one calendar year such additional assignments as may be required by the instructor in the course. A grade of Inc. not so converted becomes F.

When a student has shown marked deficiency in the use of English in any course, his grade in that course may have attached a "composition condition" (cc). This condition, while not affecting a student's eligibility for continuance in the University, must be removed before final credit will be allowed. A student who receives such a condition must take a diagnostic test before the middle of the following semester, and his registration for the next semester following this semester may not be completed until he has taken the test. If this test shows that the student needs to take a course or laboratory work to remove his condition, he must proceed actively and systematically toward the removal of his condition in the second semester following that in which he receives it. The Secretary of the Committee on Conditions in English Composition will determine those who need remedial work.

A student must attain a grade of D to pass in any study. Grade Cond. indicates that the student is conditioned but may remove the deficiency by special examination as explained above. A satisfactory re-examination changes the grade Cond. to D. Students receiving grade F must repeat the study to receive any credit for it.

Any student, after conference with the instructor concerned, may appeal from a "course grade" by presenting the appeal, in writing, to the dean of his school. Such appeals must be made not later than

the last day of classes of the next succeeding regular semester. The dean will refer the appeal to the administrative board of his school and the chairman of the department concerned. Final decision will be made by the administrative board and no change of grade will be made except as a result of decision by the administrative board.

ELIGIBILITY FOR GRADUATION

To be eligible for graduation, a student enrolled before September, 1947, must secure a grade of "C" or higher on at least half of his work; a student first enrolled in or after September, 1947, must secure an over-all average of "C."

Interpretation of this ruling:

(1) A student who completes the required courses but with grades which do not entitle him to his degree will be allowed to take additional *junior-senior courses* until he meets the requirement of the rule.

(2) A transfer student with advanced standing will come under this rule. In and after September, 1947, an over-all "C" average in the work presented is required for admission to advanced standing.

In the transfer of grades from another institution, work with the lowest passing mark is counted as work passed but not as hours credited toward graduation.

(3) To be eligible for graduation, a student must meet the requirements for the degree as they are defined by the college or school which awards it.

(4) Every candidate for a degree must present at least a "C" average (one quality point for each semester hour undertaken). The result obtained by dividing the total number of quality points by the total number of semester hours undertaken must be 1.0 or higher. The quality points per semester hour are given as follows: A=3 quality points, B=2 quality points, C=1 quality point, all others = no quality points.

(5) Hygiene grades are counted toward quality points but physical education grades are not counted.

(6) Grades transferred from another institution are not considered in computing the "C" average for graduation.

RANK BY CLASSES

A student to be ranked as a sophomore must have passed at least twenty-four semester hours; to be ranked as a junior, at least fifty-two semester hours; to be ranked as a senior, at least ninety semester hours.

To be transferred from the General College and registered in one of the upper colleges administering curricula for the junior and senior years, a student must have completed all of his freshman requirements as part of the required minimum of fifty-two semester hours of academic credits and must have an average of "C" or higher.

The normal period of enrollment in the General College is four semesters. The maximum period, in the absence of exceptional circumstances clearly justifying extension by special action, is six semesters. A student with an academic average below "C" and enrolled in the General College after his fourth semester must limit his registration to those courses which are listed in the Catalogue as General College requirements or electives.

ELIGIBILITY FOR CONTINUED RESIDENCE

An undergraduate student, in order to be eligible to continue in the University, must qualify according to the following requirements: freshmen must pass six semester hours in the first semester and twenty semester hours in the first academic year. Sophomores (and others in the General College except freshmen) must pass nine semester hours in the first semester and twenty-one semester hours in every two consecutive semesters. A student shall be transferred from the General College to a school in the Upper Division only when he has attained an overall academic average of "C". A student shall not continue in the General College for more than six semesters unless the Dean of the General College authorizes the continuance in writing with a statement of reasons for the special action. To remain eligible in the College of Arts and Sciences, School of Business Administration, School of Education, and the School of Journalism, a student must pass a minimum of nine semester hours in any one semester and twenty-one semester hours in any two consecutive semesters.

Ineligible persons are not to be considered members of the University. To restore eligibility a student must complete a prescribed amount of satisfactory work in the summer session of this University or through the University's Correspondence Bureau. An additional full course over the minimum number of courses required to remain in the University must be taken if the student is to make himself eligible by correspondence or summer work in this University. A student may not make himself eligible by taking work at another institution, unless approval by his dean and the Director of Admissions is secured in advance.

In case a student has been handicapped by circumstances beyond his control, he may, with the permission of his dean, appeal in writing for readmission by the Readmissions Committee of the school in which he was last enrolled.

No student who fails to qualify under these regulations may be readmitted to any division of the University except by vote of the Readmissions Committee of the school in which he was last enrolled. The student must present written application for readmission to his dean before the opening of any term. Action upon such application is taken by the proper Readmission Committee. A student not in residence at the end of the preceding semester must apply for readmission through the Director of Admissions.

Withdrawals

If a student wishes to withdraw at any time other than the end of a term, a formal withdrawal, which is prerequisite to honorable dismissal or re-entrance to this institution, must be approved by his dean. Such a withdrawal will be approved only after full investigation of the circumstances and after the lapse of twenty-four hours from the time the first application is filed with the dean. The withdrawal form after approval by the dean must be filed promptly with a recorder in the Central Office of Records, No. 1 Hanes Hall.

If a student withdraws after the middle of the semester and is reported as below passing in three or more courses, that semester will be counted as a semester in residence in all computations of his requirements for readmission. If a student withdraws before the middle of the semester, it will be left to the discretion of the dean as to whether or not that semester is to be counted as a semester in residence. The dean's verdict will be indicated specifically on the form used for withdrawal.

To a student withdrawing within the first nine weeks of a semester, tuition is refunded on a pro-rata basis.

Fraternities

Students may join fraternities after registration at the opening of any semester, provided they are eligible under the special regulations of the faculty as announced by the Standing Committee on Fraternities.

Transcripts of Record

Honorable dismissal has reference to conduct and character only. It will not be granted unless the student's standing as to conduct and character is such as to entitle him to continue in this University. Furthermore, in every statement of honorable dismissal full mention will be made of any probation, suspension, or other temporary restriction imposed for unsatisfactory conduct which is still in force when the papers of dismissal are issued.

Statement of record has reference to the recorded results of a student's work in the classroom. It will in every instance contain all the important facts pertaining to the student's admission, classification, and scholarship. In particular, no partial or incomplete scholastic record (for example, with failures omitted) will be given without clear evidence that it is partial or incomplete. If the student's scholarship has been such as to prevent his continuance in this University or to make him subject to any probation, suspension, or other temporary restriction which is still in force at the date of the record, a plain statement of any and all such facts will be included. Such information will be given as will make clear the system of grades employed, the number of exercises a week devoted to each course, etc.

Transcripts of record, except the first, which is furnished without cost, will be made upon payment of one dollar ($1.00) for each copy desired.

Intercollegiate Athletics

The University is a member of the Atlantic Coast Conference, and its rules necessarily conform to the rules of the Conference.

Regulations Governing Dramatic, Musical, Debating, and Other Leading Activities of the Student

1. No student will be allowed to take part in dramatic, musical, debating, oratorical, or similar events entailing absence from the University if his parents (or guardian) object to such participation.

2. Any student who was in attendance at the University during a previous semester must have passed, during his last semester of attendance, satisfactory examinations upon at least six hours, or their equivalent, before he will be allowed to represent the University in any dramatic, musical, debating, oratorical, or similar event of a public nature, or in any other leading activity.

3. Any student reported as deficient in a majority of his classes during the course of any semester may be prohibited by the dean of his school from participating in any dramatic, musical, debating, oratorical, or similar event, or any other leading activity, until such deficiency is removed.

4. There shall be a scholastic requirement of twenty-two semester hours, half C grade or better, during the preceding two semesters of residence, or twenty-five semester hours, half C grade or better, if summer school or correspondence work is necessary in addition to two regular terms.

5. No team or club will be allowed to be absent from the University more than ten lecture days in any semester.

Part Three

THE COLLEGES AND THE SCHOOLS

THE GENERAL COLLEGE

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
CORYDON PERRY SPRUILL, A.B., B.Litt. (Oxon.), Dean

*†The Administrative Board

GEORGE FREDERICK HORNER, Ph.D., *Associate Professor of English* (1955)
STERLING AUBREY STOUDEMIRE, Ph.D., *Professor of Spanish* (1955)
CARL HAMILTON PEGG, Ph.D., *Professor of History* (1956)
RICHARD ELMER JAMERSON, Ed.D., *Professor of Physical Education* (1957)
HAROLD GRIER MCCURDY, Ph.D., *Associate Professor of Psychology* (1957)
WILTON MASON, Ph.D., *Associate Professor of Music* (1957)
EDWIN CARLYLE MARKHAM, Ph.D., *Smith Professor of Chemistry* (1958)
JOSEPH EDISON ADAMS, Ph.D., *Professor of Botany* (1958)
WILLIAM ADOLPH TERRILL, Ph.D., *Assistant Professor of Accounting* (1959)

The Committee of Advisers in the General College

‡MICHAEL ARENDELL HILL, JR., A.M., *Associate Dean*
‡CECIL JOHNSON, Ph.D., *Associate Dean*
CLAIBORNE STRIBLING JONES, Ph.D.
FREDERICK CARLYLE SHEPARD, Ph.D.
CORNELIUS OLIVER CATHEY, Ph.D.
JAMES REUBEN GASKIN, Ph.D.
ANDREW WARREN PIERPONT, Ph.D.
DAVID GEETING MONROE, Ph.D.
HENRY CHARLES HOUSE, JR., A.M.

General Statement

During his freshman and sophomore years in the University at Chapel Hill every student is a member of the General College with the exception of students entering the schools of Pharmacy, Nursing, and the Dental Hygiene Program of the School of Dentistry. The studies in the General College are intended: (1) to offer experience in a sufficient variety of basic and liberal subjects to constitute the foundations of that general education which is regarded as essential to balanced development and intelligent citizenship, (2) to supply opportunities for the discovery of intellectual interests and

* The Chancellor, the Director of Admissions, and the Dean of Student Affairs are ex officio members of the Board.
† Dates indicate expiration of terms.
‡ Representatives of the Advisers on the Administrative Board.

occupational aptitudes, and (3) to provide preparation for later collegiate or professional training. These studies are, specifically, English composition and literature, a foreign language, natural science, social science, mathematics or Latin or Greek, and hygiene. The options within these requirements appear below in the summaries of the several programs. The student thus takes certain courses basic to all programs of study and in addition chooses other courses in anticipation of advanced work in special fields or on the basis of other personal considerations. If he knows what his later program of study is to be, he can in nearly all cases choose a subject in that field as part of his work in the General College. If he does not know what his program is to be, he may take the general program leading to a degree in arts and sciences, business administration, journalism, or education with the assurance that he can reach a decision during his undergraduate career and make necessary changes with minimum loss of time.

The members of the General College are of four distinguishable but overlapping types: (1) those who will proceed to the usual academic degrees at the end of four years, (2) those who will enter professional schools after three or four years, (3) those who are preparing for teaching or scientific investigation, or both, and (4) those who will take less than a complete academic program. Through the advisers the General College attempts to assist each student in appraising his qualifications and objectives and, within the limits set by its standards and resources, undertakes to adapt its offerings to his interests and needs. Thus a deficiency in a foreign language or mathematics may be overcome by taking the elementary courses. In the converse case of mastery in preparatory school or otherwise of work offered in college, the student is encouraged to meet the collegiate requirement by examination. Those who have responsibilities which limit the time available for studies are allowed to take less than the normal academic program. Those who attain distinction in the normal registration are permitted to take additional courses so as to enable them to enrich their programs or to graduate at an earlier date. By such means the College encourages each student to start with the work which he is prepared to do and to go forward with it in the way that is most appropriate in his individual case.

Upon satisfactory completion of the work of the General College, the student will normally enter one of the divisions of the University which administer the curricula of the junior and senior years. The College of Arts and Sciences offers curricula in (1) the liberal arts subjects, (2) mathematics, chemistry, geology, physics, and bacteriology (each with its special Bachelor of Science degree), (3) pre-law, pre-medical, and pre-dental programs, with and without the A.B. degree, (4) medical technology, (5) public health, (6) public health

nursing, and (7) industrial relations. The School of Business Administration presents curricula preparatory for the various careers in (1) business, (2) foreign trade and the consular service, (3) other governmental services, and (4) law. The School of Education offers curricula leading to careers in teaching, administration, and supervision. The School of Journalism provides training for newspaper work and related careers.

Naval R. O. T. C.

The courses taken in the Department of Naval Science by a student who completes the normal program prescribed by the Naval R. O. T. C. for four academic years represent twenty-four semester hours or eight semester courses. All of these courses are credited in the student's permanent record. Five courses may be counted as electives as follows: (1) Two naval science courses may be taken as General College electives. (2) Three naval science courses may be substituted for other courses normally taken in the junior and senior years. This substitution must involve one course in a department allied with the major and one non-divisional course in the College of Arts and Sciences or, in the other undergraduate schools of the University, such distribution as each school may require. The other three naval science courses are credited as net additions to the minimum requirements for graduation.

Marine Corps Platoon Leaders Class

The Marine Corps Platoon Leaders Class is an officer candidate program designed to train men who can assume responsibility as commissioned officers. The training is given in two summer training periods of six weeks each. At the completion of that training, and upon graduation, the trainee may be commissioned as an officer in the Marine Corps Reserve.

The Marine Corps Platoon Leaders Class does not have class work or drill during the University's normal academic year. The University allows elective credit, counted as part of the requirements for graduation, to students who complete the summer training courses with marks corresponding to the academic grade of C. The credit is three semester hours for each six weeks of summer training.

Students interested in enrollment in this program may apply to the Marine Officer-Instructor at the Headquarters of the Naval R. O. T. C.

Air Force R. O. T. C.

The courses taken in the Department of Air Science by a student who completes the normal program prescribed by the Air R. O. T. C.

for four academic years represent twenty-four semester hours. During the freshman and sophomore years there are four two-hour courses; in the junior and senior years there are four courses of four semester hours each. All of these courses are credited in the student's permanent record. The equivalent of five courses may be counted as follows: (1) Freshman and sophomore air science courses may be counted as the equivalent of one General College elective. (2) Other air science courses may be counted as the equivalent of four courses normally taken in the junior and senior years. The substitution for junior and senior courses must involve two courses in a department allied with the major and two non-divisional courses in the College of Arts and Sciences or, in the other undergraduate schools of the University, such distribution as each school may require.

Students who enter the Air Force R. O. T. C. program are expected to continue throughout the first two years at least. At the end of two years they may elect to request enrollment in the advanced program or to withdraw. Those who take the third year's work enter upon it with the understanding that normally they must take both the third and fourth years.

Credit by Examination

Provision is made for students who present proper credits to take substantiating examinations for advanced standing in whatever subjects the Dean of the General College may deem advisable. This opportunity is open to those who have taken, in high or preparatory school, work which is approximately equivalent to some of the studies in the General College and, at the discretion of the Dean, to others who present evidence warranting an examination. The passing of such examinations will enable the student to take during his first year the next course in the subject on which he is examined or to take other subjects not ordinarily pursued by freshmen. Formal application for examinations of this sort should be made to the Dean of the General College fifteen days in advance of the date of registration so that he can arrange for the examinations. No charge is made for these examinations. There is a charge, however, for credits obtained by examination.

If a student by a placement test or by some other criterion is placed in advanced work and if he completes the advanced work (one or more courses where the courses are in sequence) with an average of C or better, he will be given credit for the omitted freshman work with the grades that he makes on the advanced work; if he completes the advanced work with less than a C average, he will be relieved of the requirement of the freshman work omitted but will not receive hour credit for the omitted work.

Guidance of Students in the University

The University conceives education to be directed toward the best development of each individual and accordingly seeks to study each student in terms of his background of experience and his potentialities of interest, ability, and cultural needs. Each student is the special charge of both a faculty counselor and a General College adviser.

Before admission of the student, the University obtains from him and his school principal information concerning his personal history. This information is made the basis of a cumulative personal record of each student. To it are added placement test scores, results of physical examination, grades in courses, record of activities, etc. This record is in the hands of the student's faculty counselor and his General College adviser from the time the applicant is accepted until he completes the sophomore year. Then it is available to the departmental adviser in the major fields of study chosen and to the vocational adviser.

In this way the University tries to deal with each student from admission to graduation as an individual personality about whom a responsible adviser has the needed information. In using this information the personal interest and experience of the adviser may be supplemented in case of special need by members of the general administration competent in such special fields as health, financial aid, vocational guidance, and religious and moral problems.

Programs of Study in Effect in 1954-1955

With a view to the most effective preparation of those who will proceed to degrees through any of the regular curricula, the General College offers programs of study as follows:

Bachelor of Arts

FRESHMAN YEAR

Required:
- English 1-2
- Social Science 1-2
- Hygiene 11
- Physical Education 1, 2

Choose two courses:
- Astronomy 31, 32
- Chemistry 11-12 or 11-21
- Geology 1 or 41, 42
- Geography 38
- Physics 20, 24, 25
- Botany 1, Zoology 1

Choose one sequence:
- Mathematics 7-8 or 11-12 or 15-16
- *Greek 3-4 (or 1-2)
- *Latin 3-4 (or 1-2)

Choose one sequence:
- †French 3-4
- †German 3-4
- †Greek 3-4
- †Latin 3-4
- †Spanish 3-4

* Students who choose Greek or Latin in this group must choose a modern foreign language to meet the requirement in foreign language. Courses 1-2 may be taken by students who did not have classics in high school.

† Students may meet the requirement with courses 1-2, 3, 4, provided that they have no entrance deficiency in foreign language and provided, further, that they begin a new language in college.

SOPHOMORE YEAR

English 21

Foreign Language: Course 21 in the language begun in the freshman year.
Social Sciences: One course chosen from the social science courses included in the list of sophomore electives on page 120.

Natural Science or Mathematics: One course in natural science or one course in sophomore mathematics. These with the freshman courses in science must include one course in a physical science (astronomy, chemistry, physics, geology, geography) and at least one course in a biological science (bacteriology, botany, zoology, psychology). Selections may be made from the natural science courses included in the list of sophomore electives on page 120.

Electives: Six courses from the list of sophomore electives on page 120.

Physical Education 3, 4

Bachelor of Arts in Education (Secondary)

FRESHMAN YEAR

Required:
- English 1-2
- Social Science 1-2
- Hygiene 11
- Physical Education 1, 2

Choose one sequence:
- Mathematics 7-8 or 7-10 or 11-12 or 15-16
- *Greek 3-4 (or 1-2)
- *Latin 3-4 (or 1-2)

Chose one sequence:
- Chemistry 11-12 or 11-21
- Physics 24-25

OR

Choose one sequence:
- †French 3-4
- †German 3-4
- †Greek 3-4
- †Latin 3-4
- †Spanish 3-4

Any two courses of these:
- Astronomy 31
- ‡Botany 1 or Zoology 1
- Botany 41, 42
- Geography 38
- Geology 1 or 41, 42
- Mathematics 31 or 34
- Physics 20
- Zoology 41, 42

SOPHOMORE YEAR

Required:
- English 21
- Foreign language 21 (or 3-4 of language begun in the freshman year)
- One course in natural science which with, the freshman courses in science, must include one course in physical science and one course in biological science.
- Physical Education 3, 4

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* Students who choose Greek or Latin in this group must choose a modern foreign language to meet the requirement in foreign language. Courses 1-2 may be taken by students who did not have classics in high school.

† Students may meet this requirement with courses 1-2, 3, 4, provided that they have no entrance deficiency in foreign language and provided, further, that they begin a new language in college.

‡ Students who wish to take further work in botany and zoology should choose as their first courses in these areas Botany 41 or Zoology 41 instead of Botany 1 or Zoology 1.

Choose one course:*
- Economics 31-32
- Anthropology 41
- History 11, 21, 22, 41, 42, 44, 45, 46, 47, 48, 49
- Philosophy 21, 22, 41, 42
- Political Science 41, 42, 51, 52
- Sociology 51, 52, 53 (Rural Sociology 53)

Electives: Six courses from the list of sophomore electives on page 120.

Bachelor of Arts in Education (Elementary)

FRESHMAN YEAR

Required:
- English 1-2
- Social Science 1-2
- Hygiene 11
- Physical Education 1, 2
- One course from the list of electives on page 120.

Choose one sequence:
- Mathematics 7-8 or 7-10 or 11-12 or 15-16
- †Greek 3-4 (or 1-2)
- †Latin 3-4 (or 1-2)

Choose one course:
- Chemistry 11-12 or 11-21
- Astronomy 31
- Botany 1 or Zoology 1
- Geology 1 or 41, 42
- Physics 20

Choose one sequence:
- ‡French 3-4
- ‡German 3-4
- ‡Greek 3-4
- ‡Latin 3-4
- ‡Spanish 3-4

SOPHOMORE YEAR

Required:
- English 21
- Foreign language 21 (or 3-4 of language begun in freshman year)
- Geography 38
- History 21-22
- Music 41
- One course in natural science which, with the freshman courses in science, must include one course in physical science and one course in biological science.
- Physical Education 3, 4

Electives: Three courses from the list of sophomore electives on page 120.

Bachelor of Science in Science Teaching (Secondary)

FRESHMAN YEAR (Same as for Bachelor of Arts in Education, Secondary)

SOPHOMORE YEAR

Required:
- English 21
- Foreign language 21 (or 3-4 of foreign language begun in freshman year)
- Physical Education 3, 4

* Students who desire to teach in the field of social science in high school should choose History 21-22 and Political Science 41. Two of these will count as electives.

† Students who choose Greek or Latin in this group must choose a modern foreign language to meet the requirement in foreign language. Courses 1-2 may be taken by students who did not take one of these languages in high school.

‡ Students may meet this requirement with courses 1-2, 3, 4, provided that they have no entrance deficiency in foreign language and provided, further, that they begin a new language in college.

Choose one course:
- Economics 31-32
- Anthropology 41
- History 11, 21, 22, 41, 42, 44, 45, 46, 47, 48, 49
- Political Science 41, 42, 51, 52
- Philosophy 21, 22, 41, 42
- Sociology 51, 52, 53 (Rural Sociology 53)

Choose one sequence:
- Astronomy 31-32
- Botany 41 and Zoology 41
- Botany 41-42
- Zoology 41-42
- Chemistry 11-12 or 11-21, or 31 and 43 or 44
- Geology 1 or 41 and Geography 38
- Geology 41-42
- Physics 24-25 or 34-35

Electives: Five courses from the list of sophomore electives on page 120.

Bachelor of Arts in Journalism

The freshman and sophomore requirements are the same as those stated for the degree of Bachelor of Arts.

Pre-journalism students are advised, but not required, to elect Political Science 41 in the sophomore year.

Bachelor of Science in Business Administration

FRESHMAN YEAR

Required:
- English 1-2
- Social Science 1-2
- Mathematics 7-10 or 15-16
- Natural Science: Two courses chosen from the natural science courses included in the list of sophomore electives on page 120.
- Hygiene 11
- Physical Education 1, 2

Choose one sequence:
- *French 3-4
- *German 3-4
- *Greek 3-4
- *Latin 3-4
- *Spanish 3-4

SOPHOMORE YEAR

English 21

Foreign Language: Course 21 of the language begun in the freshman year *or* one course in the humanities chosen from the sophomore electives on page 120.

Economics 31-32

Business Administration 71, 72

Political Science 41

Physical Education 3, 4

Electives: Two courses from the list of electives on page 120.

Natural Science and Mathematics: One course in natural science or one course in sophomore mathematics. This with the freshman courses in science must include one course in a physical science (astronomy, chemistry, physics, geology, geography) and one course in a biological science (bacteriology, botany, zoology, psychology). Selections may be made from the natural science courses included in the list of sophomore electives on page 120.

* Students may meet the freshman and sophomore requirements in foreign language with courses 1-2, 3, 4, provided that they have no entrance deficiency in foreign language and provided, further, that they begin a new language in college.

Bachelor of Science in Chemistry

FRESHMAN YEAR

Chemistry 11-21 or 11-12
English 1-2
*German 3-4
Social Science 1-2
Mathematics 7-8 or 15-16
Hygiene 11
Physical Education 1, 2

SOPHOMORE YEAR

English 21
*German 21
Chemistry 31 if 21 was not taken, 43, 44
Mathematics 31, 32
Physics 24-25 or 34-35
Physical Education 3, 4

Bachelor of Science in Geology

FRESHMAN YEAR

Required: Geology 1 or 41-42; English 1-2; Mathematics 7-8 or 15-16; Social Science 1-2; Hygiene 11; Physical Education 1, 2

Choose one: †French 3-4; †German 3-4; †Spanish 3-4

SOPHOMORE YEAR

Required: English 21; Chemistry 11-21; Geography 38; One course chosen from the social science courses included in the list of sophomore electives on page 120.; Physical Education 3, 4

Choose one: †French 21; †German 21; †Spanish 21

Electives: One course in the humanities and two other courses chosen from the sophomore electives on page 120.

Bachelor of Science in Mathematics

FRESHMAN YEAR

Mathematics 7-8 (or 15-16)
Social Science 1-2
English 1, 2
Electives: Two courses chosen from the list on page 120.
†French 3-4 or †German 3-4
Hygiene 11
Physical Education 1, 2

* Students who in high school had two years of a language other than German may meet this requirement with German 1-2, 3, 4.

† Students may meet the freshman and sophomore requirements in foreign language with courses 1-2, 3, 4, provided that they have no entrance deficiency in foreign language and provided, further, that they begin a new language in college.

SOPHOMORE YEAR

Mathematics 31 and 34-35 or 32, 33. If Mathematics 15, 16 were taken in the freshman year omit Mathematics 31.
English 21
*French 21 or German 21
Social Science: One course from the social science courses included in the list of sophomore electives on page 120.
Physics 24-25 or 34-35, or Chemistry 11-21 or 11-12, if the two physics courses are elected in the junior or senior year.
Electives: One course in the Humanities and one other course chosen from the sophomore electives on page 120. If Mathematics 15-16 are taken in the freshman year, add one course as a free elective chosen from the list on page 120.
Physical Education 3, 4

Bachelor of Science in Physics

FRESHMAN YEAR

Required: English 1-2; Chemistry 11-21 or 11-12; Mathematics 7-8 or 15-16; Social Science 1-2; Hygiene 11; Physical Education 1, 2

Choose one: *French 3-4 or *German 3-4

SOPHOMORE YEAR

Physics 34-35 (or 24-25)
English 21
Social Science: One course chosen from the social science courses included in the list of sophomore electives on page 120.
*French 21 or German 21
Mathematics 31 and 34-35 or 32, 33. If Mathematics 15, 16 were taken in the freshman year omit Mathematics 31.
Electives: One course in the humanities and one other course chosen from the sophomore electives on page 120.
Physical Education 3, 4

Bachelor of Science in Medicine

or

Bachelor of Science in Dentistry

FRESHMAN YEAR

Required: English 1, 2; †Chemistry 11-21; Mathematics 7-8 or 11-12 or 15-16; Social Science 1-2; Hygiene 11; Physical Education 1, 2

Choose one: *French 3-4, *German 3-4, *Spanish 3-4

* Students may meet the freshman and sophomore requirements with courses 1-2, 3, 4, provided that they have no entrance deficiency in foreign language and provided, further, that they begin a new language in college.

† Alternatively, 11-12 to be followed by Chemistry 31 in the sophomore year.

SOPHOMORE YEAR

English 21 and 31 or 32 or 33 or Music or Art or Religion 28
French 21 or German 21 or Spanish 21
French 22 or German 22 or Spanish 22 or Humanities elective.
Electives: two courses
Chemistry 43
Botany 41
Physics 24-25 or Zoology 41, 42
Physical Education 3, 4

NOTE: A third year of undergraduate work is necessary before admission to the School of Medicine or the School of Dentistry. The requirements are Psychology 24, Chemistry 61 and 64, Zoology 41, 42 or Physics 24-25, and four elective courses.

Bachelor of Science in Medical Technology

The requirements for the first two years are the same as in the curriculum leading to the degree of Bachelor of Science in Medicine.

Bachelor of Science in Public Health and Bachelor of Science in Health Education

(See page 133)

Bachelor of Science in Industrial Relations

(See page 134)

Bachelor of Science in Public Health Nursing

(See page 134)

Bachelor of Science in Bacteriology

FRESHMAN YEAR

Required:
- Chemistry 11-21
- English 1-2
- Mathematics 7, 8 or 15, 16
- Social Science 1-2
- Hygiene 11

Choose one: *French 3-4 or *German 3-4

Physical Education 1, 2

SOPHOMORE YEAR

English 21
Foreign Language: Course 21 in the language begun in the freshman year.
Chemistry 43
Botany 41
Zoology 41, 42
Electives: One course chosen from the humanities courses in the list of sophomore electives on page 120 and two additional courses from any of the courses in this list.
Physical Education 3, 4

* Students placed in course number 1 of a new language may meet the freshman and sophomore requirements with courses 1-2, 3, 4, provided that they have no entrance deficiency in foreign language.

Sophomore Electives

Courses Proposed by Departments and Approved by the Administrative Board of the General College

Anthropology	41
Art	41, 42, 43, 44, 46, 48
Astronomy	31, 32
Botany	1, 41, 42, 43
Chemistry	11-12, or 11-21, 43, 44 (formerly 42, 41)
Classics	Greek 1-2, 3, 4, 21, 22 Latin 1-2, 3, 4, 21, 22 Classics 31, 32 (courses in English translation)
Dramatic Art	30
Economics	31-32
Education	41
English	31, 32, 33 (formerly 4, 5, 6)
Geology	1 or 41, 42
Geography	38
German	1-2, 1 L-2 L, 3, 4, 21, 22, 31, 32
History	11, 21, 22, 41, 42, 44, 45, 46, 47, 48, 49
Mathematics	31, 32, 33, 34, 35, 36, 41, 51, 62
Music	14-15, 31-32, 44-45, 41, 55, 56
Philosophy	21, 22, 41, 42
Physics	20, 24, 25
Political Science	41, 42, 52, 51 (formerly 81)
Psychology	24, 25, 40
Radio	58
Religion	28, 30, 45
Romance Languages	French 1-2, 3, 4, 14, 15, 21, 22, 50, 51, 52 NOTE: 21 is to count as an elective only when General College language requirements are met by 1-2, 3, 4. Spanish 1-2, 3, 4, 14, 15, 21, 22, 50, 51, 52 NOTE: 21 is to count as an elective only when General College language requirements are met by 1-2, 3, 4.
Social Science	21
Sociology	51, 52, Rural Sociology 53
Zoology	1, 41, 42

THE COLLEGE OF ARTS AND SCIENCES

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
C. HUGH HOLMAN, Ph.D., *Chairman*
FREDERIC NEILL CLEAVELAND, Ph.D., *Adviser for the Division of the Social Sciences*
GEORGE MILLS HARPER, Ph.D., *Adviser for the Division of the Humanities*
JOHN CHARLES MORROW, Ph.D., *Adviser for the Division of the Natural Sciences*

*†The Administrative Board

LEE MARSHALL BROOKS, Ph.D., *Professor of Sociology* (1955)
CLAIBORNE STRIBLING JONES, Ph.D., *Associate Professor of Zoology* (1955)
WILLIAM HOWARD PLEMMONS, Ph.D., *Professor of Education* (1955)
VICTOR AUGUST GREULACH, Ph.D., *Professor of Botany* (1955)
SAMUEL SELDEN, A.B., *Professor of Dramatic Art* (1955)
FRANK WILLIAM HANFT, A.B., S.J.D., *Professor of Law* (1956)
MILTON SYDNEY HEATH, Ph.D., *Professor of Economics* (1956)
KENNETH MERLE BRINKHOUS, M.D., *Professor of Pathology* (1957)
JAMES LOGAN GODFREY, Ph.D., *Professor of English History* (1957)
SAMUEL BRADLEY KNIGHT, Ph.D., *Professor of Chemistry* (1957)
STERLING AUBREY STOUDEMIRE, Ph.D., *Professor of Spanish* (1957)
EDWARD ALEXANDER CAMERON, Ph.D., *Professor of Mathematics* (1958)
EVERETT WESLEY HALL, Ph.D., *Kenan Professor of Philosophy* (1958)

The College of Arts and Sciences consists of the faculty of the Division of the Humanities, the Division of the Natural Sciences, and the Division of the Social Sciences. It offers the junior and senior years of work leading toward non-professional bachelor's degrees in the areas of the humanities, the natural sciences, and the social sciences, and specialized pre-professional programs as a basis for advanced study in law, medicine, and dentistry.

Admission Requirements

Students are admitted to programs of study in the College of Arts and Sciences after they have successfully completed two years of college work either in the General College of the University or in another comparable, fully accredited institution. In addition to this minimum requirement, a student must have an academic average of "C" on all college work undertaken before he can be accepted in the College. He must also have had the pattern of courses required in the General College; or in the case of students transferring from another college where this pattern was not offered, he must take during his residence in the College of Arts and Sciences those courses necessary to complete this pattern.

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* The Chancellor, the Director of Admissions, and the Dean of Student Affairs are ex officio members of the Board.
† Dates indicate expiration of terms.

Basically the pattern is:

English 1, 2, 21

Foreign language 3, 4, 21 if the student is continuing a language taken in high school; or 1, 2, 3, 4, if he is beginning another language.

Social Science 1, 2, and one sophomore elective in social science

Three courses in natural sciences with laboratory or advanced mathematics, at least one course being in biological and one in physical science

Mathematics 7, 8 or 11, 12, or 15, 16 or two courses on the appropriate level in Latin or Greek

Six sophomore electives, including any approved military science credits

Physical Education 1, 2, 3, 4

Hygiene 11

A more detailed statement is given on page 113 of this catalogue.

In exceptional cases provision will be made for students who cannot meet the exact requirements, either to take the needed work here in the General College or to take examinations to prove that they are able to carry the work in the College of Arts and Sciences. In no case, however, will a degree be conferred without the completion of the full entrance requirements of this University either by examination or by certificate and the completion of the full course as required for the degree concerned.

Persons twenty-one years of age or over who cannot meet the requirements for admission as degree candidates or who wish to improve themselves professionally may, with the approval of the Dean of the College, be admitted as special students to pursue non-degree programs. Such students, except when special exception has been arranged, are required to carry a normal class load. They must pass all of their courses in order to be eligible to continue in the University.

Procedures and Regulations

A student upon entering the College of Arts and Sciences normally selects a degree program and chooses a subject matter in which he will do his major work or selects one of the special programs leading to the A.B.-LL.B., the S.B. in Medicine, the S.B. in Dentistry, or the S.B. in Medical Technology degree. Students working on one of these special programs and all special students are advised by the appropriate divisional adviser in the College. All other students are under the direction of advisers from the departments of their major subjects.

If required freshman courses are taken after the student begins his junior year, or if required sophomore courses are taken after he

begins his senior year, only half credit is allowed. This does not apply to transfer students, provided they make up their deficiencies as soon as possible.

A student must carry fifteen semester hours of work in order to be regularly enrolled. He may carry more than seventeen semester hours of work only if his scholastic average for the preceding semester was C (1.0). In order to carry more than eighteen semester hours work his scholastic average for the preceding semester must be B (2.0). In no case can he receive credit for more than twenty semester hours in a semester.

There is a requirement that the full work of the last year must be in residence at this University. A maximum of two courses taken by correspondence through the Extension Division of this University is allowed during the last year.

In order to remain eligible to continue in residence in the College a student must pass a minimum of nine semester hours of work in any one semester and a minimum of twenty-one semester hours of work in any two consecutive semesters. The Readmission Committee of the College will consider only those cases where students have failed because of circumstances clearly beyond their control but which are remediable at the time of application for readmission.

In circumstances where students, under conditions that made the securing of academic credit impossible, have gained a knowledge of the content of courses offered in the College, credit for such courses may be secured by special examination. Such an examination must be taken before the beginning of the last semester or full summer session of work toward a degree, and application for the examination must be approved by the department in which the course is offered and by the Office of the Dean of the College at least thirty days before the examination is taken. For students not in residence in the semester preceding their last one in residence special provisions for application for the examination may be arranged by the Office of the Dean of the College.

It is the responsibility of each student in the College of Arts and Sciences to familiarize himself thoroughly with the regulations and requirements of the College. The departmental advisers and the staff of the Office of the Dean will gladly assist the student, but the responsibility for meeting the requirements of the College as they are stated in official publications rests with the individual student.

Military Science Credits

Students enrolled in the Air Force R. O. T. C. program or in the Naval R. O. T. C. program are required to carry nine semester hours of work above the minimum graduation requirements, leaving five semester courses of the military program which may replace courses

in the non-military portion of the student's schedule. For students in the College of Arts and Sciences, the junior and senior military science courses may replace non-military science courses in the following patterns:

For Air Force R. O. T. C. students, four courses replace non-military science work, these four courses replacing two allied courses and two non-divisional courses. Such a student takes a minimum of 16 non-military science courses in the College.

For Naval R. O. T. C. students, three courses replace non-military science work, these courses being divided between allied electives and non-divisional electives. Such a student takes a minimum of 17 non-military science courses in the College.

Requirements for Degrees

The College of Arts and Sciences offers work leading to the degree Bachelor of Arts, to the degree Bachelor of Science, and to certain specialized and pre-professional degrees. The particular requirements for these degrees follow. For all degrees, an average of C and grades of C on at least eighteen semester hours of work in the major are required, and the particular pattern of courses required for the particular degree must be met.

Bachelor of Arts

To secure the degree of Bachelor of Arts the student must meet each of the following requirements.

(a) A minimum of 120 semester hours credit, plus the required courses in hygiene and physical education.

(b) A minimum of forty courses, twenty of which should be of junior and senior standing.

(c) An over-all average grade of at least C. (For the method of computing the C average, see page 104, section on Eligibility for Graduation.)

(d) A distribution of courses during the first two years that corresponds to that of the General College of the University, and a distribution of courses in the junior and senior years that meets the student's particular major pattern for the requirement that approximately one-third of his work be in one major department, one-third in allied courses, and one-third in non-divisional courses.

Allied courses are those which are offered by the departments of instruction which appear in the same division as the department of major interest. Non-divisional courses are those which are offered by the department of instruction outside the division which lists the department of major interest.

(e) A satisfactory major. A student must meet the department's requirements for an undergraduate major, as they are listed in the

Description of Courses of this catalogue. He must secure a grade of C or higher on 18 semester hours of work in his major. Grades lower than C will not be acceptable in the major for students transferring from other colleges. For transfer students the number of hours taken here in the major must carry grade of C or better in the same ratio as the number 18 is to the total number of semester hours required in the major. The work of some departments will be found in more than one division; courses in such departments, however, cannot be counted both as allied to the major and as non-divisional. *A course that is listed in the major department and another department must count toward the major.*

Information about the divisions and their offering toward the Bachelor of Arts degree follows:

THE DIVISION OF THE HUMANITIES

GLEN HAYDON, Ph.D., *Chairman*
LYMAN COTTEN, Ph.D., *Secretary*

The departments of instruction included in the Division of the Humanities are as follows:

Art
The Classics
Dramatic Art
English
General and Comparative Literature
Germanic Languages
History
Journalism
Music
Philosophy
Radio
Religion
Romance Languages

GENERAL STATEMENT

After a student has selected his department of major interest, that department must require of him a minimum of six whole semester courses, or the equivalent in whole and half courses, and may require a maximum of eight such courses. In the allied departments of the division the student must take at least five such semester courses and may take eight, distributed between at least two departments; not more than four of these divisional courses may be taken within one department. It is required that the student take from departments in the other divisions at least five and not more than seven whole semester courses, in all a sufficient number of courses to make a total of at least twenty whole semester courses over and above the full requirements of the General College. Special programs may be submitted by students.

PROGRAM FOR HONORS WORK

A student in one of the departments in the Division of the Humanities may, as the result of distinguished work, be awarded a degree with *Honors* or *Highest Honors.*

I. *Application.* At the end of the sophomore year or the beginning of the junior year the student with a good record for courses in the General College may become a candidate for honors by applying to the head of his major department, or to the chairman of the departmental committee on honors, with whom he will confer on a unified program of work. A student is required to show on his registration form the honors course the second term before he plans to be graduated. The student who fails to register with his departmental adviser for honors before the end of the final registration period which begins his senior year may be admitted to candidacy only upon application to the Advisory Board of the Division.

II. *Requirements.* The candidate for honors is expected to give evidence of ability to do work which in quality and quantity can be judged as outstanding. In addition to a good general knowledge of his major subject he must secure an intensive understanding of that special field which will form the background of his essay. To this end he should do, in term and in vacation, a large amount of reading additional to that assigned in his regular courses. (For reading courses see below, Part IV.) A grade average of B in the major subject will normally be considered as a minimum. The following are the formal requirements for a degree with honors in the division:

1. Written comprehensive examination.
2. Essay. This essay, which need not be a piece of original research, must be submitted in typed form by May 1 of the senior year.
3. Oral examination. This examination, one hour in length, will be limited to the student's special field.

All of the honors work must come up to a standard of excellence to be determined by the departmental committee, which shall have charge of the administration of the requirements, and shall have the power to demand that a student return to his regular status. The candidate showing a superlative degree of ability and industry will be awarded *Highest Honors.*

III. *Adviser.* To guide him in his reading and in the preparation of his essay a member of the staff of his major department will be assigned the candidate for honors as a special adviser.

IV. *Exemption from Classroom Courses.* The candidate for honors may receive credit for two reading courses. Such courses, with the

exemption from class attendance and the requirements of regular courses, should usually be taken during his senior year, though the departmental committee, on the recommendation of the special adviser, will have power to modify such procedure. Only one of the reading courses may be taken during the junior year, not more than one of them may be taken during a single semester, and both of them must be counted as belonging to the major subject. The candidate who, upon his own initiative or the decision of the departmental committee, abandons working for honors, or who fails to satisfy all the formal requirements for a degree with honors, may receive, with the consent of the departmental committee, credit for the reading courses which he has completed.

THE DIVISION OF THE SOCIAL SCIENCES

GORDON WILLIAMS BLACKWELL, Ph.D., *Chairman*
CARL FRASER BROWN, Ph.D., *Secretary*

This division includes the following departments of instruction:

Economics	Philosophy	Psychology
Education	Physical Education	Sociology
History	Political Science	

Psychology 24 and 25 may be counted only as natural science.

Business Administration 71 may be taken for credit, unless Economics 74 has been taken, but all other courses in business administration carry no credit toward a degree offered by the College of Arts and Sciences, except in programs of majors in economics, psychology, and industrial relations. Only Education 41 and Education 71a of the courses given in the School of Education may be taken for credit in the College of Arts and Sciences.

General Statement

This division requires the student to complete a minimum of six whole semester courses or the equivalent in whole and half courses in his chosen department of major interest. If, however, essential foundation courses in the major department have not been completed in the General College, a maximum of eight such courses may be required in that department. From five to seven courses in allied departments within the Division of the Social Sciences are required, and from departments in the other divisions at least five and not more than seven whole semester courses, in all a sufficient number of courses to make a total of at least twenty whole courses over and above the full requirements of the General College.

PROGRAM FOR HONORS WORK

The program for honors work in the Division of the Social Sciences is substantially the same as that in the Division of the Humanities.

THE DIVISION OF THE NATURAL SCIENCES

ARTHUR ROE, Ph.D., *Chairman*
MAURICE WHITTINGHILL, Ph.D., *Secretary*

The following departments of instruction are included in the division:

Botany	Mathematics	Psychology
Chemistry	Philosophy	Zoology
Geology	Physics	

GENERAL STATEMENT

The general requirements in this division are as follows: from six to eight courses, or the equivalent, in the department of major interest; from five to seven courses in allied departments of the division; and from five to seven courses in departments in other divisions, not to exceed a total of twenty courses. The dean is authorized to make such adjustments as are necessary in order that a student with a major in science shall not have to take more than the standard number of hours for graduation.

Bachelor of Science

For those students whose interest is in the applied sciences and who wish to enter seriously upon the pursuit of the specialized knowledge and techniques of the sciences, the University offers several curricula leading to the degree of Bachelor of Science. Each of these provides for specialization in a particular science, accompanied by the necessary instruction in related fields of science and a minimal requirement of work in English, foreign language, and other non-scientific fields. These curricula are:

Bachelor of Science in Bacteriology
Bachelor of Science in Chemistry
Bachelor of Science in Geology
Bachelor of Science in Mathematics
Bachelor of Science in Physics

Requirements for these degrees are given in the headnotes to the Description of Courses of the departments concerned (beginning on page 185). In designing programs of study based on these departmental statements, students should also consult the statements for the various divisions, given in the preceding section of this general statement.

Special Programs

PREPARATION FOR THE STUDY OF LAW

Students preparing for the study of law may do so in one of the following ways: (1) they may take the regular four-year course leading to the A.B. degree, choosing subjects proper to their purpose; (2) they may take the special courses leading to the A.B.-LL.B.; (3) they may take three years of academic work without the bachelor's degree in view, but careful regard to meeting the exact requirements of the school they plan to enter.

Students who intend to matriculate in the School of Law of this University may plan their courses in such a way as to secure the A.B. and LL.B. degrees in six years instead of the seven years required for the two separately. For the A.B. they must complete, *before matriculation in the School of Law,* the courses outlined below in the General College and the College of Arts and Sciences, with an average of C or better, and, in addition, the first year of law to the satisfaction of the School of Law. The LL.B. degree is then secured by completing the remaining two years of law.

Students taking the academic subjects listed in the combined A.B.-LL.B. program are hereby notified that the completion of the required academic courses does not necessarily mean admission to the School of Law. If it is necessary to limit enrollment, preference will be given to applicants with superior records, considering both the quality and amount of pre-law work.

*English 1, 2, 21, 31
Social Science 1-2
Mathematics 7-8 or Latin 3-4 (or 1-2) or Greek 3-4 (or 1-2)
Hygiene 11
Physical Education 1, 2, 3, 4
Foreign language 3, 4, 21; or 1-2, 3-4 (providing the language is not the same as that presented for entrance)
One sophomore elective in the humanities
History 71 and 72 or 44 and 45
Economics 31-32
Political Science 41, and one other course in political science
Psychology 24, 25
†Two courses in natural science
English 44 and one other English course, preferably 52
Seven elective courses

* English 32 or 33, or a music or art elective or Religion 28, may be substituted for English 31.
† At least one of these courses must be chosen from the physical sciences or mathematics.

PREPARATION FOR THE STUDY OF MEDICINE OR OF DENTISTRY

Students preparing for the study of medicine or dentistry should spend as much time in securing a well-rounded cultural education as their age and financial resources permit. If possible they should take the regular four-year course leading to the bachelor's degree. If this is not practicable they may take the special course leading to the S.B. in Medicine or the S.B. in Dentistry or they may take three years of academic work without the bachelor's degree in view, but with careful regard to meeting the specific requirements for admission to the medical or dental schools. In general it seems desirable for students who are *preparing for medicine* by taking courses leading to the bachelor's degree to select either chemistry or zoology as the major field of study, but the completion of a major in another department may still provide adequate preparation. In order to do this he should take courses in the premedical sciences in the first two years in the General College, namely Chemistry 11-12, 31 or 11-21; Physics 24-25 or Botany 41 and Zoology 41. In the College of Arts and Sciences he could then follow whatever his interests may direct and still complete adequate and necessary work in biology, chemistry, and physics prerequisite to the medical curriculum.

Because of the widening social and economic interests of the medical and dental professions, students preparing to enter either profession should take, in addition to the requirements in the sciences, as many courses as possible in history, literature, economics, philosophy, and psychology.

Because there is not sufficient space in the medical and dental schools to admit all students who meet the quantitative standards, and because more than average intelligence and aptitude are required for the satisfactory completion of the medical or dental curriculum, the quality of the student's work is of the greatest importance. All students interested in the study of medicine or dentistry should attempt to stand in the highest third of their academic classes.

BACHELOR OF SCIENCE IN MEDICINE OR BACHELOR OF SCIENCE IN DENTISTRY

The University recommends that each applicant for admission to its School of Medicine or to its School of Dentistry prepare himself as fully as his age and resources permit. If possible, he should secure a bachelor's degree before beginning his professional study. If this is impracticable, he may secure excellent preparation by completing the academic curriculum outlined below leading to the degree of Bachelor of Science in Medicine and Bachelor of Science in Dentistry. Each degree is conferred upon the satisfactory completion of the first year of work offered in the School of Medicine or the School of Dentistry.

NOTE: Students pursuing the academic subjects listed below are hereby notified that the completion of these courses does not necessarily mean admission to the School of Medicine or of Dentistry. From the rather long list of applicants are chosen those who are deemed the most promising material for admission to the schools. No arrangement exists for granting the degree of S.B. in Medicine or S.B. in Dentistry for work in any schools other than these. Therefore, in order to secure the S.B. in Medicine or S.B. in Dentistry, the student must complete the first year of work offered in the School of Medicine or of Dentistry, and in no other such school. To be eligible for either degree at least the last year of academic work must have been done in this institution.

FIRST YEAR

Chemistry 11-21 (or Chemistry 11-12 to be followed by 31 in the second year)
English 1-2
French or German or Spanish 3-4
Mathematics 7-8 or 11-12 or 15-16
Social Science 1-2
Hygiene 11
Physical Education 1, 2

SECOND YEAR

Botany 41
Chemistry 43
English 21
English 31 or 32 or 33 (or Art or Music or Religion approved elective)
French or German or Spanish 21
French or German or Spanish 22 or Humanities elective
Physics 24-25 (or Zoology 41-42)
Electives, two courses
Physical Education 3, 4

THIRD YEAR

Chemistry 61, 64 or 61, 62
Psychology 24
Zoology 41-42 (or Physics 24-25, whichever was not taken in second year)
Electives, four courses

BACHELOR OF SCIENCE IN MEDICAL TECHNOLOGY

In order to meet the needs of the medical profession in North Carolina and to provide adequate training in medical technology for the young men and women of the state, the School of Medicine of the University of North Carolina offers jointly with the College of Arts and Sciences of the University of North Carolina two programs leading to the baccalaureate degree in medical technology.

The first of these programs, which has been in operation by the College of Arts and Sciences for a number of years, consists of a four-year collegiate curriculum followed by a year of practical experience and training in a hospital to qualify the student for an examination offered by the American Society of Medical Technology. The additional year of medical training does not necessarily have to be taken at the Memorial Hospital of the University of North Carolina and the successful completion of the collegiate portion of the program does not guarantee admission to training in the hospital.

The following courses constitute the four-year academic program for the degree of Bachelor of Science in Medical Technology:

*English (4 courses)	12 hours
†French, German, or Spanish 3-4, 21	9 hours
Freshman social science (2 courses)	6 hours
Hygiene and physical education	4 hours
Freshman mathematics	6 hours
One elective in the humanities	3 hours
Physics 24-25	8 hours
Chemistry 11-21, 43, 61; 146 or 44 or 62 or 64	25, 26 or 27 hours
Botany 41	4 hours
Zoology 41, 42, 105	12 hours
Zoology 110 or Public Health 135 (Parasitology)	3 or 2½ hours
Bacteriology 132	7 hours
Pathology 52	3 hours
Elective (not science)	12 hours
Elective (free)	12 hours

At least 18 semester hours of grade C or higher are required from the following: chemistry courses numbered above 31, zoology courses numbered above 42, bacteriology and pathology courses.

NOTE: After the completion of this program, a year of practical experience and training in a hospital will be necessary before the student can qualify for the examinations offered by the American Society of Medical Technology.

A new program leading to a B.S. in Medical Technology, all portions of which must be taken in the University of North Carolina, designed to be completed in four calendar years, has recently been instituted at the University. In this program the student takes a prescribed curriculum for three years in the General College and the College of Arts and Sciences of the University. His fourth year consists of a twelve-months course in medical technology in the School of Medicine. Students who complete the first three years of this program are hereby notified that the completion of these courses does not necessarily mean admission to the twelve-month course in medical technology in the School of Medicine. Only the most promising material from the list of applicants can be chosen to fill the limited number of vacancies in the medical technology course. The schedule of academic work for the first three years of this program follows;

FIRST YEAR

Chemistry 11-21 (or Chemistry 11-12, to be followed by 31 in second year)	French or German or Spanish 3-4
English 1-2	Social Science 1-2
Mathematics 7-8	Hygiene 11
	Physical Education 1, 2

SECOND YEAR

English 21	Chemistry 61
English 31 or 32 or 33 or Fine Art	Zoology 41-42
French or German or Spanish 21	Humanities elective
Chemistry 43	Social Science elective

* An art or music elective or Religion 28 may be substituted for the fourth course of English.

† Language 1-2, 3-4 will satisfy the requirement providing the language is not the same as that presented for entrance.

THIRD YEAR

Bacteriology 132
Bacteriology 104
Biochemistry 101
Zoology 105
Zoology 110 or Public Health 135
Two non-science electives
Free elective

FOURTH YEAR

Twelve-month course in medical technology in the School of Medicine of the University.

BACHELOR OF SCIENCE IN PUBLIC HEALTH AND BACHELOR OF SCIENCE IN HEALTH EDUCATION

Foundation training for students interested in careers in public health is available through the School of Public Health in conjunction with the College of Arts and Sciences and with the School of Education.

Satisfactory completion of any one of the above degrees prepares the student for certain positions in public health and for admission to graduate work leading to the Master of Science in Public Health or, after work experience, the Master of Public Health degree.

The program of work for the baccalaureate degrees consists, at the Upper Division, of a core of general public health courses, courses in a public health specialty, and related courses. Since the program varies with the degree—Bachelor of Science in Public Health or Bachelor of Science in Health Education—each individual's work must be planned with a faculty adviser in the department of the major. For further detail see the catalogue of the School of Education and the departmental sections of the catalogue of the School of Public Health.

For students in the General College who are planning to work toward either the Bachelor of Science in Public Health or the Bachelor of Science in Health Education the following are recommended:

FIRST YEAR

English 1, 2
Social Science 1-2
Foreign Language 3, 4
Mathematics 7-8 or equivalent
Botany 41 or Physics 20
Hygiene 11
Physical Education 1, 2

SECOND YEAR

English 21 and an acceptable humanities elective
†Foreign Language 21
Chemistry 11-12
Political Science 41
*Anthropology 41 and/or Education 41
*Psychology 25 and/or Sociology 52 or 62
Physical Education 3, 4

* At least one in each group. In accordance with the program of the College of Arts and Sciences, Sanitary Science majors may substitute science courses for the other in each group.

† Foreign language 1-2, 3-4 will satisfy the requirement providing the language is not the same as that presented for entrance.

BACHELOR OF SCIENCE IN PUBLIC HEALTH NURSING

Candidates for this degree must fulfill the following requirements:

1. Satisfactory completion of 60 semester hours in an accredited college or university. The amount of credit not exceeding 60 semester hours extended for work in other colleges will be determined by the Committee on Admissions.

   (a) *Required:*

   18 semester hours in the natural sciences, selected from zoology, botany, chemistry, physics, psychology.
   12 semester hours in English.
   6 semester hours in the social sciences, selected from sociology, upper division psychology, history.

   (b) *Electives:*

   The departmental adviser will assist the student in the selection of the remaining courses with reference to her individual needs.
2. Graduation from an approved school of nursing, with credit to be determined by the Committee on Admissions.
3. Satisfactory completion of the curriculum in Public Health Nursing in the School of Public Health at the University of North Carolina.

BACHELOR OF SCIENCE IN INDUSTRIAL RELATIONS

After two years in the General College, the student electing the curriculum in industrial relations in the College of Arts and Sciences takes a "core" of eight courses in business administration, economics, psychology, history, and sociology, a major of five courses in education, history, political science, psychology, or sociology, and six elective courses. (In addition to this curriculum detailed below, another program with special emphasis upon economics and business administration is offered by the School of Business Administration.)

FIRST AND SECOND YEARS

English 1, 2, 21
Mathematics 7-8 or 7-10
Psychology 25, one other biological science, and one physical science
Modern foreign language 3, 4, 21; or 1-2, 3-4 (provided the language is not the same as that presented for entrance)
Social science: Social Science 1-2; Economics 31-32; Political Science 41; Sociology 51
Three sophomore electives
Hygiene 11
Physical Education 1, 2, 3, 4

THIRD AND FOURTH YEARS

Business Administration 71, 155, and one elective
Economics 191, and 192 or 193
Psychology 133
History 168 or Economics 135
One course in statistics (economics, psychology, or sociology)
Five courses in one of the following: education, history, political science, psychology, sociology
Seven courses of electives in natural science or the humanities (history is to be counted among the humanities, unless the five courses are taken in history)

THE SCHOOL OF EDUCATION

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
ARNOLD PERRY, Ed.D., *Dean*

*†The Administrative Board

RICHARD ELMER JAMERSON, Ed.D., *Professor of Physical Education* (1955)
DOROTHY C. ADKINS, Ph.D., *Professor of Psychology* (1955)
CORNELIUS OLIVER CATHEY, Ph.D., *Associate Professor of History and Social Science* (1956)
G. GORDON ELLIS, Ph.D., *Associate Professor of Education* (1956)
PAUL EDMONDSON SHEARIN, Ph.D., *Professor of Physics* (1957)
JOHN MINOR GWYNN, Ph.D., *Professor of Education* (1957)
CARL FRASER BROWN, Ph.D., *Professor of Education* (1957)
WILLIAM SMITH WELLS, Ph.D., *Professor of English* (1957)
EDWARD WILLIAM NOLAND, Ph.D., *Professor of Sociology and Research Professor in the Institute for Research in Social Science, Chairman, Sociology Department* (1958)
GEORGE EDWARD SHEPARD, Ed.D., *Professor of Physical Education* (1958)

General Statement

The following outline will serve as a guide for students enrolled in the School of Education.

Undergraduate students who wish to prepare for teaching in the elementary school or in the secondary school will be admitted to the School of Education in accordance with the admission procedure outlined in the bulletin of the School of Education.

Each student will follow the program of courses in education outlined for the elementary certificate or the secondary certificate. In addition he will select courses in his major field of concentration to meet the requirements for graduation from the University and general certification requirements.

Curricula which meet the requirements of the State Board of Education for a certificate to teach in the public schools of the various states are administered by the School of Education in cooperation with the academic departments of the University. Majors are offered and certificate requirements are met in art, elementary education, English, foreign language (French, German, Latin, Spanish), health and physical education, science (general science, biology, chemistry, physics), and social studies (economics, history, political science, geography, and sociology). Students in the School of Education are encouraged to prepare for a second teaching field or to take courses which will enable them to direct extracurricular activities.

* The Chancellor, the Director of Admissions, and the Dean of Student Affairs are ex officio members of the Board.
† Dates indicate expiration of terms.

Bachelor of Arts in Education (Secondary)

FRESHMAN YEAR

Required:
- English 1-2
- Social Science 1-2
- Hygiene 11
- Physical Education 1, 2

Choose one sequence:
- Mathematics 7-8 or 7-10 or 11-12 or 15-16
- *Greek 3-4 (or 1-2)
- *Latin 3-4 (or 1-2)

Choose one sequence:
- Chemistry 11-12 or 11-21
- Physics 24-25

OR

Choose one sequence:
- †French 3-4
- †German 3-4
- † Greek 3-4
- † Latin 3-4
- †Spanish 3-4

Any two courses of these:
- Astronomy 31
- ‡Botany 1 or Zoology 1
- Botany 41, 42
- Geography 38
- Geology 1 or 41, 42
- Mathematics 31 or 34
- Physics 20
- Zoology 41, 42

SOPHOMORE YEAR

Required:
- English 21
- Foreign language 21 (or 3-4 of language begun in freshman year)
- Physical Education 3, 4
- One course in natural science which with the freshman courses in science must include one course in physical science and one in biological science

Choose one course:
- §Economics 30
- Anthropology 41
- §History 11, 21, 22, 41, 42, 44, 45, 46, 47, 48, 49
- Philosophy 21, 22, 41, 42
- Sociology 51, 52, Rural Sociology 53
- Political Science 41, 42, 51, 52

Electives: Six courses from the list of sophomore electives on page 120.

* Students who choose Greek or Latin in this group must choose a modern foreign language to meet the requirement in foreign language. Courses 1-2 may be taken by students who did not take one of these languages in high school.

† Students who present credit for two units of high school work in foreign language but who are placed in course number 1 of that foreign language may meet the requirement with courses 1-2, 3-4.

‡ Students who wish to take further work in botany and zoology should choose as their first course in these areas Botany 41 or Zoology 41 instead of Botany 1 or Zoology 1.

§ Students who desire to teach in the field of social studies in high school should include among their choice History 21-22 or History 71-72 and Economics 30.

Bachelor of Science in Science Teaching (Secondary)

FRESHMAN YEAR

(Same as for Bachelor of Arts in Education, Secondary)

SOPHOMORE YEAR

Required:
- English 21
- Foreign language 21 (or 3-4 of foreign language begun in freshman year)
- Physical Education 3, 4

Choose one course:
- Economics 31-32
- Anthropology 41
- History 11, 21, 22, 41, 42, 44, 45, 46, 47, 48, 49
- Political Science 41, 42, 51, 52
- Philosophy 21, 22, 41, 42
- Sociology 51, 52, Rural Sociology 53

Choose one sequence:
- Astronomy 31, 32
- Botany 41 and Zoology 41
- Botany 41, 42
- Zoology 41, 42
- Chemistry 11-12 or 11-21 or 31 and 44 or 31 and 43
- Geology 1 or 41 and Geography 38
- Geology 41, 42
- Physics 24, 25 or 34, 35
- Electives: Five courses from the list of sophomore electives on page 120.

Bachelor of Arts in Education (Elementary)

FRESHMAN YEAR

Required:
- English 1-2
- Social Science 1-2
- Hygiene 11
- Physical Education 1, 2

Choose one sequence:
- Mathematics 7-8 or 7-10 or 11-12 or 15-16
- *Greek 3-4 (or 1-2)
- *Latin 3-4 (or 1-2)

Choose one course:
- Chemistry 11-12 or 11-21
- Astronomy 31
- Botany 1 or Zoology 1
- Geology 1 or 41, 42
- Physics 20

Choose one sequence:
- †French 3-4
- †German 3-4
- †Greek 3-4
- †Latin 3-4
- †Spanish 3-4

One course from the list of electives on page 120.

SOPHOMORE YEAR

Required:
- English 21
- Foreign language 21 (or 3-4 of language begun in freshman year)
- Geography 38
- History 21-22
- Music 41 or 55 or 56
- Physical Education 3, 4
- One course in natural science which with the freshman courses in science must include one course in physical science and one in biological science

Electives: Three courses from the list of sophomore electives on page 120.

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* Students who choose Greek or Latin in this group must choose a modern foreign language to meet the requirement in foreign language. Courses 1-2 may be taken by students who did not take one of these languages in high school.

† Students who present credit for two units of high school work in foreign language but who are placed in course number 1 of that foreign language may meet the requirement with courses 1-2, 3, 4.

Professional Program

The professional program designed to meet the certification requirements has been organized around three areas of study—*The School, The Pupil,* and *Teaching (The Practicum).* The content of the course, which of necessity cuts across these areas, has been organized to eliminate unnecessary duplication. The materials used and the activities engaged in through these courses offer a variety of individual and collective experiences. Schools are visited, classrooms are used for observation of student growth, teachers are interviewed for professional development, community activities are observed.

The following professional courses are listed in the catalogue for credit toward graduation:

Elementary Students:

Ed. 41. INTRODUCTION TO THE STUDY OF EDUCATION (3). *(The school, the pupil,* and *teaching).*

Ed. 71a. CHILD GROWTH AND DEVELOPMENT (3). *(The pupil).*

Ed. 71b. CHILD GROWTH AND DEVELOPMENT (3). *(The pupil).*

Ed. 74. THE ELEMENTARY SCHOOL (3). *(The school).*

Ed. 61. MATERIALS AND METHODS IN TEACHING IN ELEMENTARY GRADES (3). *(Teaching).*

Ed. 62. STUDENT TEACHING IN ELEMENTARY GRADES (9). *(The pupil, teaching,* and *the school).*

Secondary Students:

Ed. 41. INTRODUCTION TO THE STUDY OF EDUCATION (3). *(The school, the pupil,* and *teaching).*

Ed. 71a. CHILD GROWTH AND DEVELOPMENT (3). *(The pupil).*

Ed. 71b. CHILD GROWTH AND DEVELOPMENT (3). *(The pupil).*

Ed. 99. THE SECONDARY SCHOOL (3). *(The school).*

One from METHODS AND MATERIALS OF TEACHING IN: Ed. 63, Health and Physical Education; Ed. 75, Instrumental Music; Ed. 76, Choral Music; Ed. 77, Art; Ed. 81, English; Ed. 83F, French; Ed. 83S, Spanish; Ed. 85, Social Studies; Ed. 87, Latin; Ed. 89, Mathematics; Ed. 91, Science; Ed. 93, Public Health Education (3). *(Teaching).*

One from STUDENT TEACHING: Ed 64, Health and Physical Education; Ed. 78, Instrumental Music; Ed. 79, Choral Music; Ed. 80, Art; Ed. 82, English; Ed. 84F, French; Ed. 84S, Spanish; Ed. 86, Social Studies; Ed. 88, Latin; Ed. 90, Mathematics; Ed. 92, Science; Ed. 94, Public Health Education (9). *(The school, the pupil, teaching).*

Subject Matter Program (Secondary)

Students who plan to qualify in a second teaching field should check the State Certification Requirements for specific credits in different areas.

ART

Students who choose art as their major teaching field should take: Art 41 or 42 or 43; 170 or 75; 44, 46, 55, 81, 84; 48 or 50; 82 or 110; and one studio elective.

Some of the above courses may be taken as sophomore electives. Additional art courses may be taken through use of electives in the upper college.

Students who choose art as a second teaching field will qualify for a North Carolina teaching certificate by taking a total of thirty semester hours of course work including: Design (industrial, interior, costume); Drawing and Painting; Ceramics and/or Sculpture; Art History. Appropriate courses taken in any accredited college will count toward this certificate.

BIBLE AND RELIGION

Students who choose Bible and religion as a second teaching field will qualify for a North Carolina teaching certificate by taking a total of twenty-one semester hours of course work including: Old Testament and New Testament and choices from

Religion 28, 30, 31, 80, 81, 92, 103, 45 or 195.

Appropriate courses taken at the collegiate level in any accredited institution will count toward this certificate.

DRAMATIC ART

Since dramatic art is not certified as a major teaching field in North Carolina, it is not offered as a teaching major. It is suggested that students wishing to take work in the area of dramatic art take the following courses:

(a) Dramatic Art 63
(b) Dramatic Art 64
(c) Two of the following: 155, 161, 162

ENGLISH

Students who choose English as their major teaching field will take:

(a) English 50 (or 115ab)
(b) English 96 (or 170)
(c) English 81 or 82
(d) English 40 or 41 or 44 (or specially designed course)
(e) One of the following: English 70 (or 103ab), 75, 83, 91, 93
(f) One of the following: English 84, 88, or 94 (or 104ab), 97, 98
(g) One elective in English

Students who choose English as a second teaching field will qualify for a North Carolina teaching certificate by taking a total of thirty semester hours. Required courses include work in Shakespeare, American Literature, and Advanced Grammar and Composition. Specifically

recommended in addition is work in Speech, English or American Literature, Teaching Reading, and Young People's Literature. Appropriate courses taken at the collegiate level in any accredited institution will count toward the certificate.

FRENCH

Students who choose French as their major teaching field should take:

French 50, 51, 52, 71, 72, 126, 145

Students who choose French as a second teaching field will qualify for a North Carolina teaching certificate by taking a total of thirty semester hours of course work (twenty-four if they present two high school units of French) including six semester hours of spoken language.

HEALTH AND PHYSICAL EDUCATION

All students who choose health and physical education as a major teaching field will take:

Physical Education 75, 76, 77, 78, 79, 86, 87
In addition:
(a) Men will take Physical Education 65, 66, 67, 68, 69, and 70
(b) Women will take Physical Education 54, 55, 56, 57, 58, and 59

Students who wish to qualify as part-time teachers of health and physical education and coaches of athletic teams will qualify for a North Carolina teaching certificate by taking fifteen semester hours of work in physical education, including: Principles, Organization, Administration and Supervision of Physical Education and Health, Physical Education skills and applied techniques, and Health Education, including the teaching of Health and School Health Problems.

HEALTH EDUCATION

Students who choose health education as a major teaching field will take:

Bacteriology 51 or 151
Education 176 or Psychology 144
Physical Education 75 and 76; or
Zoology 103 and Physical Education 76 or
Zoology 103 and Physical Education 123
Public Health 10abc
Public Health 18
Public Health 19

General college electives especially recommended are: Anthropology 41, Botany 41, or Physics 20, Psychology 25, and approved English. Recommended electives for the junior and senior years are: Economics 61, Geology 41 or 42, Physical Education 123, Sociology 62, and Zoology 103 and 110.

Students working toward the B.S. in Health Education are encouraged to complete requirements for certification to teach biology. One extra course—Botany, preferably Botany 41—would be needed. However, additional advanced courses in biology (Zoology 103 and 110) are suggested, and students who plan to take one of these in the senior year should clear their schedules for it by taking Public Health 18 the fall semester of the junior year.

This curriculum prepares not only for certification to teach health and one (or more) science but for certain health education positions in voluntary health agencies. It also provides admission requirements to graduate schools of public health for those planning careers in community health education.

Students who choose health education as a second teaching field may qualify for a North Carolina teaching certificate by taking a total of twenty-four semester hours including: (1) The Individual (a. Personal Health, b. Mental Health, c. First Aid and Safety); (2) Community and School (a. Principles of Public Health, b. Environmental Health, c. Healthful Family Living); (3) Organization and Administration of School Community Health.

LATIN

Students who choose Latin as their major teaching field should take:

Latin 51 and 52
Four of the following: Latin 53, 101, 102, 103, 104, 105, 106, 109, 112

Students who choose Latin as a second teaching field will qualify for a North Carolina teaching certificate by taking a total of twenty-four semester hours of work in Latin (based on two units of high school Latin to be reduced six semester hours for each additional unit of entrance credit).

LIBRARY SCIENCE

Students who choose library science as a second teaching field will qualify for a North Carolina teaching certificate by taking a total of eighteen semester hours of work, including: Administration and Organization of the School Library, Reference Books and Their Use,

Book Selection for Children, Book Selection for Young People, Simplified Classification and Cataloging.

Library Science 94, 95, 96, 122, 123, 143

MATHEMATICS

Students who choose mathematics as their major teaching field should take the following courses or their equivalent:

Mathematics 31, 32, 33, 102, 103

Two additional courses in mathematics to make a total of twenty-one semester hours.

Students who choose mathematics as a second teaching field will qualify for a North Carolina teaching certificate by taking a total of twenty-one semester hours of work, including: College Algebra, Trigonometry, Analytic Geometry. Courses recommended in this total include: Differential and Integral Calculus; History of Mathematics; Mechanical Drawing; Surveying; Application of Mathematics to Science, Engineering, Commerce, and Industry; Statistics; College Physics; Navigation; and Astronomy. Appropriate courses taken at the collegiate level in an accredited institution will count toward this certificate.

MUSIC

Students who choose music as their major teaching field will take the following courses or their equivalents:

Music laboratory 14, 15, 21, 44, 45, 47, 48, 61, 64, 71, 74, 101, and appropriate courses each year in applied and ensemble music.

Courses 1 through 48, or their equivalents, should be completed during the freshman and sophomore years; the remaining courses during the junior and senior years.

The program outlined above constitutes major subject requirements for the degree of Bachelor of Arts in Education with major in music, and is designed for those who wish to teach music in the public schools. It constitutes, also, the basic requirements for graduate work in the field of music.

Students who choose music as a second teaching field will qualify for a North Carolina teaching certificate with a total of twenty-three semester hours in music. For the certificate in general music education this should include: (1) Applied Music (a. Piano, b. Voice—at least half of the voice credit shall be voice training); (2) Theory of Music (harmony, form, ear training); (3) History and Appreciation of Music. For the certificate in instrumental music education

this should include: (1) Applied Music (major instrument; at least two minor instruments—piano advised as one, voice permitted as one); (2) Theory of Music (harmony, form, ear training); (3) History and Appreciation of Music.

NATURAL SCIENCE

Students who choose science as their major teaching field will complete ten courses in science including three of the following sequences:*

Botany 41 and 42 or 43
Chemistry 11-12 or 11-21 (Required)
Geology 41 and Geography 38 or Geology 41, 42
Physics 24-25 (Required)
Zoology 41, 42

Any science courses taken while the student is in the General College may count toward satisfying this requirement, but at least six of the courses must be passed with a grade of C or better.

Students who choose science as a second teaching field will qualify for a North Carolina teaching certificate by taking a total of thirty semester hours of work including at least six semester hours each in biology, chemistry, and physics and three semester hours in geography or geology.

Individual certificates will be granted in biology, chemistry, or physics on the basis of twelve semester hours of credit and in the area of general science on the basis of eighteen semester hours of credit in three of the areas biology, chemistry, physics, and geography or geology. Appropriate courses taken at the collegiate level in any accredited institution will count toward these certificates.

SOCIAL STUDIES

Students who choose social studies as their major teaching field must have the following courses or their equivalent: Social Science 1-2, and History 21-22 or 71-72. In addition to these prerequisite courses, students must pursue one of the following plans.

(1) Take the following courses or their equivalents:
   (a) Political Science 41, Sociology 51 or 52, Economics 30 or 61
   (b) One course from the following: Geography 153, 154, 157, 158, 159 or 160

* Students planning to teach in North Carolina will take at least two courses in biology and one in geography or geology.

(c) Two three-hour courses in history of junior-senior rank
(d) Two three-hour elective courses from the Division of the Social Sciences or Geography; or

(2) Complete at least six courses in one of the following departments as prescribed by that department: Economics, History, Political Science, Sociology and Anthropology, or Geography, and complete two additional courses not in the field selected from the following: Political Science 41, Sociology 51, Economics 61, and Geography 153 (or equivalents of these courses).*

Students who choose social studies as a second teaching field will qualify for a North Carolina teaching certificate by taking a total of thirty semester hours of course work divided among the following areas: at least six semester hours in European or World History; at least six semester hours in American History; at least twelve semester hours from Political Science, Geography, Economics and Sociology; electives from these areas.
Appropriate courses taken at the college level in an accredited institution may be counted toward this teaching field.

Individual certification will be granted in any of the specific areas: History, Political Science, Geography, Economics, and Sociology, in which twelve semester hours credit is presented. Certification for Citizenship or Civics, or Problems in American Democracy would require credit for at least eighteen semester hours from Political Science, Economics, and Sociology.

SPANISH

Students who choose Spanish as their major teaching field should take:

Spanish 50, 51, 52, 71, 72, 73, 145

Students who choose Spanish as a second teaching field will qualify for a North Carolina teaching certificate by taking a total of thirty semester hours of course work (twenty-four if they present two high school units of Spanish) including six semester hours of spoken language.

Subject Matter Program (Elementary)

Program of study leading to a major in elementary education and to certification as an elementary school teacher in North Carolina and other states may be arranged by the student in consultation with

* Students who choose a program in history will find it necessary to complete this plan and two additional three-hour courses from Political Science, Geography, Economics, and Sociology in order to qualify for the social studies certificate.

his adviser. Completion of General College requirements (freshman and sophomore years) is a prerequisite to enrollment in the School of Education and to admission to courses in education designed to develop in the student the competencies needed for effective guidance and teaching of young children.

Men students may enter the University as freshmen. Their General College program should include, where possible, two courses in American history, two courses in geography (principles and regional), an introductory course in political science, and a course in music appreciation or a course in art appreciation. These courses can usually be worked into the program of the student in meeting General College requirements.

Women students may enter the University as juniors and go directly into the School of Education provided General College requirements have been met. Women who are planning to transfer to the University after two years at some other institution should plan their freshman and sophomore programs to meet General College requirements and to include the courses in history, geography, political science, art, and music mentioned above. Women admitted to the University with marked deficiencies in these courses and in General College requirements will find it necessary to take an extra term to meet graduation requirements and to complete courses needed for teacher certification in a particular state. The summer session before the junior and senior years as well as the summer following the senior year may be used for this purpose. Students who plan their program properly may transfer to the University after two years in some other recognized institution and complete the work in the regular four semesters of two academic years.

Specific courses for the junior and senior years are selected in consultation with an adviser in elementary education. Not all students will have the same courses during the same semester. Variations will occur because of differences in freshman and sophomore programs and because of individual needs of students. All students, however, must meet graduation requirements of the University and must include all courses required by the state of North Carolina for certification as a Class A teacher in the primary or grammar grades.

Elementary certification requires the following subject-matter credits. Many of these should be completed during the first and second years of the college program.

SUBJECT	SEMESTER HOURS
1. English	12
Courses required for degree plus Children's Literature. Electives recommended are Advanced Grammar and Speech	
2. American History and Government	9
Required:	
a. American History	6 s.h.
b. Government	3 s.h.
3. Geography	6
Principles and Regional Recommended	
4. Fine and Industrial Arts	12
Required:	
a. Art	6 s.h.
b. Music	6 s.h.
5. Health and Physical Education	6
Required:	
a. Principles, Practices, and Procedures in Physical Education for Elementary Schools	3 s.h.
b. Principles, Practices and Procedures in Health for Elementary Schools	3 s.h.

THE SCHOOL OF JOURNALISM

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
WILLIAM WHATLEY PIERSON, Ph.D., Litt.D., *Dean of the Graduate School*
NORVAL NEIL LUXON, Ph.D., *Dean*

*The Administrative Board

GORDON WILLIAMS BLACKWELL, Ph.D., *Professor of Sociology and Director of the Institute for Research in Social Science*
LYMAN ATKINSON COTTEN, Ph.D., *Associate Professor of English*
CHARLES ATKINSON KIRKPATRICK, D.C.S., *Professor of Marketing*
HUGH TALMAGE LEFLER, Ph.D., *Professor of History*
JOSEPH L. MORRISON, A.B., *Associate Professor of Journalism*
LEON M. POLLANDER, *Director of Advertising in the School of Journalism*
CHARLES PHILLIPS RUSSELL, A.B., *Professor of Journalism*
ALBERT IRVING SUSKIN, Ph.D., *Professor of Latin*
EARL WYNN, M.S., *Professor of Radio and Director of the Communication Center*

General Statement

The School of Journalism, founded as a department in 1924 and changed to School status in 1950, offers a two-year course leading to the A.B. in Journalism. The School also offers a graduate minor for candidates for the M.A. and Ph.D. degrees in English, history, political science, psychology, and sociology, and M.A. in Communication. At press time for the General Catalogue, the School of Journalism had a request awaiting action by the Administrative Board of the Graduate School for a major in journalism leading to the A.M. degree.

Students who have completed two years of liberal arts courses are admitted provided they have met the requirements of the General College and have a C average. Because of the nature of class and laboratory assignments, students should be able to type with reasonable skill, accuracy, and speed.

The academic program of the School of Journalism, including the two years of liberal arts required for admission, is designed to provide students with 1) a basic liberal education, 2) an understanding of the responsibilities of a free press in a democratic society, and 3) a fundamental knowledge of journalistic techniques.

Students are encouraged to acquire a background in the humanities, the social sciences, literature, and the natural sciences while preparing for journalism careers. The program of the School prepares

* The Chancellor, the Director of Admissions, and the Dean of Student Affairs are ex officio members of the board.

students for editorial and advertising positions on newspapers and magazines, for radio and television news writing posts, and for a variety of positions in the broad field of mass communications.

The undergraduate professional program in the School of Journalism consists of eight courses in journalism (18 courses are currently offered), two in American or North Carolina history, two in political science, and one in economics plus electives selected to meet the requirements for the A.B. and the individual interests of the student.

Students planning to enter the School of Journalism are advised to meet the General College social science requirement by taking Social Science 1 and 2, and Political Science 41. Journalism staff members are available to advise pre-journalism students concerning elective courses in the General College. Students planning to transfer from other institutions are urged to note General College requirements and meet them in their institutions.

The School of Journalism Foundation of North Carolina, Inc., was established in 1949 to promote the advancement of professional education for journalism at the School of Journalism. Income from the Journalism Foundation endowment is expended for that purpose at the discretion of the dean.

Journalism and pre-journalism students interested in extra-curricular activities in line with their academic program are encouraged by the School of Journalism to work on *The Daily Tar Heel,* student newspaper.

For further information see course listings on pp. 278-80 and write to the Dean of the School of Journalism for the separate journalism bulletin.

THE SCHOOL OF BUSINESS ADMINISTRATION

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
*RICHARD JUNIUS MENDENHALL HOBBS, A.B., LL.B., *Dean; Professor of Business Law*
†ARCH RICHARD DOOLEY, M.B.A., *Dean Appointive*
DUDLEY DEWITT CARROLL, M.A., *Dean Emeritus of the School of Commerce; Professor of Economics*
JAMES MILTON PARRISH, Ph.D., *Assistant Dean; Assistant Professor of Economics*
MILTON SYDNEY HEATH, Ph.D., *Chairman, Department of Economics; Chairman, Graduate Studies in Economics; Professor of Economics*
REX SHELTON WINSLOW, Ph.D., *Director of Bureau of Business Services and Research; Professor of Economics*
WILLARD J. GRAHAM, Ph.D., C.P.A., LL.D., *Director of The Executive Program; Professor of Accounting*
GUSTAV THEODOR SCHWENNING, Ph.D., *Editor of The Southern Economic Journal; Professor of Business Administration*

‡The Administrative Board

GORDON WILLIAMS BLACKWELL, Ph.D., *Professor of Sociology and Director of the Institute for Research in Social Science*
PAUL NEWMAN GUTHRIE, Ph.D., *Professor of Economics*
EVERETT WESLEY HALL, Ph.D., *Kenan Professor of Philosophy*
MILTON SYDNEY HEATH, Ph.D., *Professor of Economics*
CLEMENT SEARL LOGSDON, Ph.D., *Professor of Marketing*
NORVAL NEIL LUXON, Ph.D., *Professor of Journalism and Dean of the School of Journalism*
ERLE EWART PEACOCK, M.B.A., C.P.A., *Professor of Accounting*
ARTHUR ROE, Ph.D., *Professor of Chemistry*
§CORYDON PERRY SPRUILL, A.B., B.Litt. (Oxon.), *Professor of Economics and Dean of the General College*
REX SHELTON WINSLOW, Ph.D., *Professor of Economics and Director of the Bureau of Business Services and Research*
HARRY DEMERLE WOLF, Ph.D., *Professor of Economics*

General Statement

Although courses of instruction in economics and in certain business subjects had been offered for many years in the University of North Carolina, not until 1919 was there established a comprehensive, well-organized business curriculum. In that year the General Assembly, in conformity with the recommendations of the President and the Board of Trustees, enacted the legislation which resulted in the organization of the School of Commerce. The name of the School was changed in 1950 to the School of Business Administration. The

* For the year, 1954-1955.
† Beginning September, 1955.
‡ The Chancellor is an ex officio member of the Board. The Assistant Dean of the School serves as Secretary of the Board.
§ Ex officio

School occupies a place in the University organization coordinate with other professional schools and the College of Arts and Sciences.

The School was admitted to membership in the American Association of Collegiate Schools of Business in 1923. This is an organization dedicated to the promotion of high standards in professional education for business. Membership is based on the number and caliber of the faculty; the thoroughness of the academic program offered; the content and breadth of the curriculum, both in general education and in business; the financial support of the school; and the physical facilities provided for carrying on the work. The undergraduate course of study, leading to the degree of Bachelor of Science in Business Administration, covers a period of four years and is designed to give a foundation of general education in the natural sciences, the humanities, and the social sciences, as well as to supply a professional background to those who intend to engage in business administration.

For those desiring work at a more advanced level in business administration, the degrees of Master of Business Administration, Master of Science, and Doctor of Philosophy are offered through the Graduate School.

Purpose and Policy

The phenomenal industrial development of the South in recent years has produced an imperative need for trained businessmen. The School of Business Administration, in a large sense, is the expression of the University's desire to serve this need. Substantial support has been accorded the School by both the University and the state as a whole. The School has been provided with a well-qualified instructional staff. New quarters, consisting of a quadrangle of three buildings offering outstanding classroom and laboratory facilities, were occupied early in 1953.

The teaching policy of the School assumes that effective education for business responsibility should consist not only of development of understanding of the principles and methodology which govern the organization and administration of individual business enterprises, but also of an understanding of the problems and the larger relationships of the economy as a whole. In his attempt to master the more specialized aspects of business, the student is not permitted to lose sight of social and other cultural values. Instead, the curriculum in business administration is founded upon the realization that an effective career of business leadership must be based upon a broad cultural foundation. The exacting demands which face the modern business executive require that he possess more than a high degree of professional competence in technical and specialized aspects of business administration. He must also have a broad grasp of gen-

eral business fundamentals and must have a full awareness of the economic, social and human forces which form the background against which his business career will be pursued. In short, the effective business executive must, first of all, be a responsible, informed, and perceptive citizen.

For these reasons, the various programs in business administration have been carefully formulated to maintain a balance between the equally important needs of general education and of professional education for business responsibility. Whenever possible, therefore, the plan is followed of presenting the subject matter of the various courses from the point of view of the administrator, always bearing in mind that his field of interest includes the broad external relationships as well as the internal administration of his business. Adherence to this point of view enables the student to consider the problems and practices of business in a broad perspective.

Programs leading to the degree of Bachelor of Science in Business Administration are carefully coordinated with the required two-year program of the General College, as described on page 116. The undergraduate programs in business administration place further emphasis upon intellectual breadth through requirements that each of the possible majors in business administration draw upon a background offered by the seven required "core" courses in fundamental business subjects and that they be supplemented by appropriate elective courses in areas other than business administration and economics.

The "core" courses which are required of all candidates for the Bachelor of Science degree in Business Administration are:

Economics 81	Money and Banking
Economics 170	Statistics
Business Administration 91	Business Law
Business Administration 130	Industrial Management
Business Administration 150	Personnel Relations
Bus. Admin. 160 (Econ. 124)	Marketing
Business Administration 180	Corporation Finance

These core courses, plus the required program in the General College during the freshman and sophomore years, as described on page 116, form the background for more intensive concentration in one of the majors in business administration. These majors include Accounting, Banking and Finance, Business Economics, Insurance, Marketing, Personnel, Production, Statistics, and Transportation and Traffic. Combined majors in Business Administration-Radio and Business Administration-Law are also offered. Specific details of requirements for each of these majors are presented in the catalogue of the School of Business Administration. In every case, in addition to advanced courses in his major and electives in business administra-

tion or economics, a student will be required to select certain free elective courses chosen from areas outside the School and designed to give educational breadth.

Department of Economics

The Department of Economics is administratively and educationally a part of the School of Business Administration and provides instruction as an integral part of the program of the School.

In addition, the Department offers, as is customary in other universities, undergraduate and graduate programs in economics in the College of Arts and Sciences and in the Graduate School, leading to the degrees of Bachelor of Arts, Master of Arts, and Doctor of Philosophy, for those students desiring to specialize in economics.

Reserve Officer Training Corps Program

Regularly organized units of the Air Force R. O. T. C. and Naval R. O. T. C. are maintained at the University. With careful planning, it is possible for a student to complete successfully the requirements of either of these programs coincident with an undergraduate curriculum in business administration in four academic years. More complete information is available in the catalogue of the School of Business Administration.

Special Students

Not infrequently persons already engaged in business careers feel the need of additional special training but are unable to spend a relatively long period at the University or cannot provide proper credits for admission as regular students. The School of Business Administration will admit as special students certain applicants who are twenty-one years of age or over. Such an applicant should submit a statement from his employer or former employers concerning the term, nature, and quality of his work. Self-employed persons should submit a resume of their business experience. A personal interview with the Dean or Assistant Dean is also recommended. Veterans who apply for admission as special students and who wish to qualify for assistance under one of the governmental educational programs must receive the specific approval of the Veterans' Administration. All special students are admitted on probation and are not candidates for degrees.

Stenography

No credit toward a degree is given for proficiency in stenography, but every student is urged to acquire facility in typewriting before graduation. A knowledge of shorthand is often valuable for persons entering the field of business after graduation from college.

Graduate Study

Professional education in business administration at the graduate level is offered for college graduates with undergraduate majors in business administration as well as for students who have been awarded undergraduate degrees in other fields. A student's initiative and analytical and creative powers are developed and tested to a degree impossible of attainment in the undergraduate years. Certain courses have been developed exclusively for graduate students; some, designed primarily for the encouragement and guidance of research activity, are conducted informally and on a basis of close personal contact between professor and student.

The School of Business Administration offers through the Graduate School the graduate degrees of Master of Business Administration, Master of Science, and Doctor of Philosophy. The Department of Economics offers through the Graduate School the programs leading to the degrees of Master of Arts and Doctor of Philosophy with a major in economics.

Candidates for the degree of Doctor of Philosophy may take a major in either business administration or economics and a minor in the other field.

Graduates of other institutions desiring to enter as candidates for advanced degrees should submit their records, together with application for admission, to the Dean of the Graduate School. For further details, see the catalogue of the Graduate School.

The Bureau of Business Services and Research

The Bureau of Business Services and Research is an agency of the School which cooperates with The Executive Program, the University Extension Division, private business firms, foundations, and trade associations in organizing and extending the services and facilities of the School of Business Administration to the business community of North Carolina.

Through a faculty advisory committee, the Bureau assists in forwarding the research objectives of the School. The Bureau also acts upon requests from North Carolina business and industry which seek assistance in the solution of business problems. It administers adult educational projects for business executives. These include short courses, institutes, and conferences held both on the campus in Chapel Hill and in towns and cities throughout the state. The Bureau acts as consultant for business firms and associations seeking to establish research and training programs. It organizes consultant services and schedules speakers from the staff of the School.

The section of this catalogue devoted to the Extension Division provides more detailed information on adult education projects conducted by the School.

The Executive Program

In the fall of 1953, the University established a new program of advanced study in business administration for men in management—The Executive Program. This program is designed for persons already carrying major executive responsibility. All areas are presented from the top management point of view to increase general effectiveness of executive performance. The over-all objective is the development of broad-guage senior management personnel.

The program is not a series of self-contained units; instead, attention is devoted to cases and problems which involve several areas. The emphasis is upon (a) the development of an understanding of the problems of *all* divisions of the business, and (b) an approach to the solution of these problems from the top management point of view.

The program consists of a combination of eight alternate "week ends" and two one-week periods of full-time residence. Each applicant for admission should be nominated by his employer and sponsored by him. Admission is highly selective; successful business experience weighs heavily in the selection.

For further details regarding this program, write to: Willard J. Graham, Director, The Executive Program, School of Business Administration, University of North Carolina, Chapel Hill.

Library Facilities

In addition to the splendid facilities afforded by the general library of the University, the School of Business Administration is equipped with its own collection of more than 40,000 volumes. Housed in the newly constructed west wing of the Main Library, the Library of Business Administration and Economics offers extensive modern research facilities and a commodious reading room. Noteworthy are the special materials in the field of Industrial Relations, the collection of periodical publications in the various fields of business, and state and federal government publications. The Library of the School is a regular subscriber to 125 scholarly and trade journals. It also receives gift subscriptions to nearly 400 additional publications. Thirty special informational services are available, including such services as the Bureau of National Affairs, Standard and Poor's Corporation, Moody's, Fitch's, and Commerce Clearing House. A sizable annual appropriation assures that the collection will be well maintained and kept current.

A special librarian is in charge of the Library of Business Administration and Economics. The staff is prepared to aid students in the collection of materials for research work. Through cooperative relationships with other libraries in the state and nation, the Business Administration Library is able to assist in obtaining material which may not be currently available in the University. Special library privileges including access to the stack rooms and private carrels may be accorded graduate students.

Lectures, Observation Trips, and Clinics

Valuable supplementation to the regular curriculum is furnished by lectures by prominent businessmen and educators who are invited to the University for this purpose.

In addition to formal lectures, the School periodically arranges for business leaders to come to the University for informal discussion of current business problems in their respective fields to provide the student with a clearer understanding of actual business practice.

From time to time classes in business administration visit neighboring factories and other types of business firms to gain firsthand insight into business operations.

Endowments

In July, 1946, the Business Foundation of North Carolina, Inc., was established. Its articles of incorporation provided: "The objects and purposes for which the corporation is formed are to aid and promote, by financial assistance and otherwise, all types of education, service and research for business and industry at or through the School of Commerce and other departments of the University of North Carolina . . . ." The substantial funds of the Business Foundation are a source of great potential strength for the School of Business Administration as grants to the School may enable it to command important additions to the staff and provide facilities for more effective business research in the region.

An endowment was received by the School in May, 1947, through the Business Foundation, when Mr. Ralph C. Price and Mrs. Kathleen Price Bryan established the Julian Price Professorship of Insurance as a memorial to their father. It is the purpose of the Julian Price Endowment to provide funds for "instruction in any or all phases of life insurance." Provision was made, moreover, that any excess income "shall be applied to expenses of research in said School . . . or toward scholarships." The first holder of the Price professorship was named in 1948, and at the present time the insurance program is rapidly growing in importance as its contributions to the training of leaders in the insurance field proves its worth.

In October, 1951, the Business Foundation accepted a generous gift from the Wachovia Bank and Trust Company. The income from this endowment is to be made available annually to the Trustees of the University by the Foundation for support of instruction and research in the field of banking. Under this endowment a distinguished professorship, known as the Wachovia Professorship in Banking, has been established in the School.

The Reynolds Student Investment Trust

In October, 1952, Mr. Charles H. Babcock generously gave the University a sum of money to establish an investment trust to be managed by a Student Governing Board composed of selected students qualified to make sound investment decisions. In creating the trust, Mr. Babcock said, "It is hoped that the investment trust to be set up will serve as a useful teaching medium in Economics and Fiance courses. It should bring additional realism and responsibility into the classroom, thereby being of practical benefit both to the student and the professor. The investment management problems presented should be a stimulus to investment thinking even though the student does not plan a career in banking or finance." One-half the income arising from the operation of the investment trust is to be donated to the Chapel Hill Community Chest and the other half added to the corpus of the fund.

Scholarships, Fellowships, and Assistantships

Two teaching fellowships in economics, each of a value of $1,350, are awarded annually by the Graduate School through the School of Business Administration. The recipients may be called upon to teach or to perform other duties not to exceed one-third of their time. Applications should be made before March 1 to the Dean of the Graduate School.

There are a number of Business Foundation Scholarships and Service Fellowships of varying amounts for M.B.A. candidates, application for which should be made to the Dean of the School of Business Administration before March 15.

The attention of entering freshmen is directed particularly to the Marvin B. Smith Scholarship for students in the School of Business Administration described on page 84.

Scholarship opportunities for students majoring in accounting are offered by the Peat, Marwick, Mitchell & Co. Scholarship; the two scholarships of the North Carolina Association of Certified Public Accountants; and the North Carolina Accounting Faculty Scholarship. These are annual scholarships, each amounting to $300. Applications should be submitted to the Chairman of the Accounting Scholarship Committee as early as feasible but not later than June 15.

The Ernest H. Abernethy Fellowship in Southern Industry, of an annual value of $1,000 was established in 1944. This has recently been supplemented to a total amount of $1,250. The holder is required to do research in an industry of importance to the South and to prepare a thesis as a result of the study.

The General Electric Scholarship, of an annual value of $500, was made available to a junior majoring in accounting and/or finance in 1953.

The Westinghouse Achievement Scholarship, also for $500 per year, is available to a rising senior in Business Administration.

A research fellowship in motor transportation, valued at $1,000, was made possible by a grant received from the Pilot Freight Carriers, Inc., of Winston-Salem, North Carolina in 1954.

A number of graduate and undergraduate assistantships are awarded each year. The recipients are expected to perform such tasks as grading papers and conducting laboratories.

Detailed information regarding all of these awards may be obtained from the Dean of the School of Business Administration.

Beta Gamma Sigma

Beta Gamma Sigma, recognized by the American Association of Collegiate Schools of Business as the national scholarship society in Commerce and Business, maintains a chapter, Alpha of North Carolina, at the University. Those students who rank scholastically in the highest 10 per cent of the senior class and the highest 3 per cent of the junior class may be considered for membership in this organization, although the number selected is generally less than indicated by the foregoing figures.

Admission

For requirements for admission to the School of Business Administration, see page 60. For the curriculum offered in the first two years while the student is formally enrolled in the General College, see page 116.

Courses and Curricula Leading to the Degree of Bachelor of Science in Business Administration and Bachelor of Arts in Economics

A description of courses offered by the School of Business Administration and Department of Economics is given in Part IV of this catalogue. A list of the core courses required of all degree candidates in Business Administration is shown on page 152. The several curricula which lead to the degree of Bachelor of Science in Business Administration are described in detail in a separate catalogue of the School of Business Administration, which may be obtained by addressing a request to the Dean.

THE GRADUATE SCHOOL

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
WILLIAM WHATLEY PIERSON, Ph.D., Litt.D., LL.D., *Dean*
ARNOLD KIMSEY KING, Ph.D., *Associate Dean*

*†The Administrative Board

RUPERT BAYLESS VANCE, Ph.D., LL.D., *Kenan Professor of Sociology and Research Professor in the Institute for Research in Social Science* (1959)
WILLIAM LEON WILEY, Ph.D., *Professor of French* (1959)
JOHN EDGAR LARSH, JR., Sc.D., *Professor of Parasitology* (1955)
CHARLES BASKERVILL ROBSON, Ph.D., *Professor of Political Science* (1955)
FLETCHER MELVIN GREEN, Ph.D., *Kenan Professor of History and Research Professor in the Institute for Research in Social Science* (1956)
GLEN HAYDON, Ph.D., *Kenan Professor of Music* (1956)
ARTHUR ROE, Ph.D., *Professor of Organic Chemistry* (1956)
‡DOUGALD MACMILLAN, Ph.D., *Kenan Professor of English* (1957)
§WILLIAM MARVIN WHYBURN, Ph.D., *Kenan Professor of Mathematics* (1957)
JOHN NATHANIEL COUCH, Ph.D., D.Sc., *Kenan Professor of Botany* (1958)
MILTON SYDNEY HEATH, Ph.D., *Professor of Economics and Research Professor in the Institute for Research in Social Science* (1958)
GEORGE SHERMAN LANE, Ph.D., *Kenan Professor of Germanic and Comparative Linguistics* (1958)

General Statement

The Graduate School offers opportunity for further and advanced study by those who have already completed a college course, in the fostering of research, in training students to become investigators and teachers in special fields of learning, and in the application of research methods to the problems of society, government, and industry. The University of North Carolina has been interested in research for more than a century and has made contributions in science, the social sciences, and the languages. Through its research clubs and learned journals, as well as through publications and other contributions to learning made by members of its faculty, the University has acquired the authority to give advanced instruction. For this it is competent from the standpoint both of the personnel of its faculty and of the material equipment in libraries and laboratories.

Instruction leading to the master's degree was offered at this institution previous to the American Civil War, and such higher degrees were granted in course. Formal action with high standards in

* The Chancellor is an ex officio member of the Board.
† Dates indicate expiration of terms.
‡ Absent on leave 1954-1955. Replaced for the year by Richmond Pugh Bond, Ph.D., Professor of English.
§ Absent on leave 1954-1955. Replaced for the year by Floyd Burton Jones, Ph.D., Professor of Mathematics.

requirements was taken in 1876 to establish a system of graduate, as distinct from undergraduate, instruction. The first doctor's degree was awarded in 1883. A Graduate Bulletin, issued in 1885, showed that nearly all departments offered advanced courses. The number of students during those years was small, but the work accomplished in both the humanities and the sciences was of distinguished quality. Given distinct status in 1903 and the leadership of a dean, the Graduate School has experienced steady and, since 1920, rapid growth.

The institution is a member of the Association of American Universities. The Graduate School annually publishes a bulletin, entitled *Research in Progress,* which records analytically the scholarly contributions of the faculty and graduate students. The School operates an Appointments Bureau, which supplies facilities for placement.

Work for advanced degrees is under the supervision of the graduate faculty. Under authority delegated by the graduate faculty, the immediate direction of the Graduate School is in the charge of an Administrative Board, of which the Dean is chairman. Special requirements and regulations made by this board are outlined in the catalogue of the Graduate School, which is published annually and is the official publication of the Graduate School.

Curricula and Degrees

The degrees under the supervision of the graduate faculty are the Master of Arts (A.M.), Master of Science (S.M.), and Doctor of Philosophy. Degrees of Master of Arts or Master of Science are offered in the fields of anatomy, anthropology, art, bacteriology and immunology, biological chemistry, botany, chemistry, classics, comparative literature, dramatic art, economics and business administration, education and physical education, English, geology and geography, Germanic languages, history, mathematics, music, oral surgery, orthodontics, pedodontics, pharmacology, pharmacy, philosophy, physics, physiology, political science, psychology, Romance languages, social work, sociology and rural sociology, statistics, and zoology, and in the special curricula in comparative linguistics, folklore, industrial relations, and personnel administration. The degree of Doctor of Philosophy is offered in the fields of anatomy, anthropology, bacteriology, biological chemistry, botany, chemistry, classics, comparative literature, economics and business administration, education, English, geology and geography, Germanic languages, history, mathematics, music, pharmacy, philosophy, physics, physiology, political science, psychology, public health, Romance languages, sociology, statistics, and zoology, and in the curricula in comparative linguistics and industrial relations. Minor programs for the doctorate may be obtained in the curricula in folklore and personnel administration.

Professional graduate degrees are offered in art (Master of Arts in Creative Art), communication (Master of Arts in Communication), dentistry (Master of Science in Pedodontics, Master of Science in Oral Surgery, and Master of Science in Orthodontics), education (Master of Education and Doctor of Education), library science (Master of School Librarianship and Master of Science in Library Science), music (Master of Music), public health (Master of Science in Public Health, Master of Public Health, Master of Science in Sanitary Engineering, and Doctor of Public Health), regional planning (Master of Regional Planning), and social work (Master of Social Work).

The Curriculum in Comparative Linguistics

The Administrative Committee: The Dean, *Chairman;* Professor Eliason, *Secretary;* Professors Gaskin, Holmes, Keller, Lane, Linker, and Ullman.

In this curriculum the facilities available within the University for the study of comparative linguistics and philology are organized. It is possible for students to submit programs of study in this subject leading to the degrees of Master of Arts and Doctor of Philosophy. It is also possible for those with majors in language to secure a minor in comparative linguistics.

Social Work

For the degree of Master of Social Work a minimum of four semesters and a summer quarter is required. At least nine courses must be chosen from those approved by the Graduate School for the degree of Master of Arts. The selection of these courses must conform to the general rules of the Graduate School as to major and minor grouping. The same principle shall be applied, in so far as practicable, to the selection of other courses.

Application for admission should be made as far as possible in advance of the academic year. Since field work placements are limited in number and must be arranged in advance of the student's arrival, early application for admission is desirable. Application should be directed to the Dean of the School of Social Work.

The applicant for admission to pursue studies leading to the degree of Master of Social Work must have received a bachelor's degree from a college or university of recognized standing with eighteen semester hours in anthropology, economics, history, political science, psychology, and sociology, at least six semester hours of which must have been in advanced courses in one of these fields. The student deficient in these requirements may be admitted to courses, but must remove the deficiencies before being eligible for admission to candidacy for a degree.

The applicant is requested to consult the special catalogue of the School of Social Work, which is available upon request.

The Curriculum in Folklore

Administrative Committee: The Dean, *Chairman;* Professor Hudson, *Secretary;* Professors Gillin, Holmes, Keller, Johnson, Schinhan, and Stoudemire.

The facilities of the University available in such departments as English, Germanic Languages, Music, Romance Languages, and Sociology have been mobilized in the interest of students who desire to undertake a major or a minor in folklore. A candidate for the A.M. degree may secure a major and a candidate for the Ph.D. degree may secure a minor in that subject.

Public Health

This curriculum, leading to both master's and doctor's degrees, has been authorized by the Administrative Board of the Graduate School. For information consult the catalogue of the Graduate School and the special bulletin of the School of Public Health.

The Curriculum in Industrial Relations

Administrative Committee: The Dean, *Chairman;* Professor H. D. Wolf, *Director;* Professors Adkins, Blackwell, Calhoon, Green, A. K. King, and Wager.

This curriculum is based on the concept of industrial relations as an area in itself. It is selected from the course offerings of the School of Law and the School of Business Administration, and from the departments of Economics, Sociology, Political Science, Psychology, and Education. The graduate major leading to the degrees of Master of Science in Industrial Relations and Doctor of Philosophy is in the area of industrial relations rather than in a single department. Definite areas of specialization within the several departments, however, may be selected for concentrated study. When pertinent to the individual graduate program, the minor may be selected from more than one department. In all instances a common content of essential courses selected from the offerings of the several departments is required.

The Curriculum in Personnel Administration

Administrative Committee: The Dean, *Chairman;* Professor Wager, *Secretary;* Professors Adkins, G. G. Ellis, A. K. King, Jocher, and H. D. Wolf.

This curriculum mobilizes the instructional resources having relation to personnel administration which have developed in the depart-

ments of Economics and Business Administration, Education, Political Science, Psychology, Social Work, and Sociology. Opportunities are afforded qualified students to select programs of study which cut across departmental lines. Students may also choose definite areas of specialization within the respective departments which provide programs of concentrated study.

*Summary of the Requirements for Higher Degrees

MASTER'S DEGREES

1. A bachelor's degree from a recognized institution.
2. A minimum period of one year of resident study.
3. A reading knowledge of one modern foreign language. (But see the catalogue of the Graduate School.)
4. Nine graduate courses, six of which must be in the department of the major.
5. A written examination in the field of the major.
6. An oral examination covering the entire field of study.
7. A thesis.

DOCTOR OF PHILOSOPHY

1. Admission is the same as for the master's degree.
2. A minimum of three years of graduate study, at least one of which must be at the University of North Carolina.
3. A reading knowledge of French and German. (But see catalogue of the Graduate School.)
4. A major covering adequately the field of major interest and at least six courses in a minor, which may under special circumstances be in the same department.
5. A preliminary oral examination.
6. A written examination in the field of major interest.
7. An oral examination covering the entire field of study.
8. A dissertation.

Catalogue of the Graduate School

For information concerning the graduate faculty, fields of research, fellowships and other aids, expenses and tuition, and for regulations governing courses of study, credits, admissions, examinations, and higher degrees, reference must be made to the special catalogue of the Graduate School.

* Requirements for professional graduate degrees differ in some respects from this summary. Consult the catalogues of the Graduate School and professional schools for complete information.

THE SCHOOL OF LAW

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
HENRY P. BRANDIS, JR., A.B., LL.B., LL.D., *Dean*

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CLIFFORD P. LYONS, Ph.D., *Professor of English*
ROBERT HASLEY WETTACH, M.A., S.J.D., *Professor of Law*

General Statement

The School of Law, now in its one hundred and tenth year and with a regular faculty of ten plus seven lecturers, offers a three-year course leading toward the degrees of LL.B. and J.D. It is on the approved lists of the North Carolina Board of Law Examiners, of the Regents of the State of New York, and the American Bar Association. It is a member of the Association of American Law Schools and is one of forty of the leading law schools of the country in which a chapter of the honorary society of the Order of the Coif has been established.

While greater emphasis is placed upon North Carolina decisions, statutes, and practices than upon those of other states, legal materials are studied as a part of the Anglo-American common-law system. Thus the school prepares its students for practice in other states as well as in North Carolina.

Candidates for admission to the School of Law must have completed, with a C average, a minimum of three years of work acceptable toward a baccalaureate degree at an approved college or university. If this work has followed the combined degree program offered by the College of Arts and Sciences or by the School of Business Administration of this University, the student may receive the bachelor's degree in Arts or in Business Administration, as the case may be, upon the satisfactory completion of the first year in law. Though, as indicated above, students may be admitted to the School of Law on the completion of a minimum of three years of college work, the School recommends completion of the work for a degree before entering upon the study of law.

Beginning students are admitted only once a year, at the opening of the fall semester.

The curriculum covers a period of six semesters, but this time may be shortened by attendance during summer sessions.

The School of Law is located in Manning Hall. The Law Library, in the charge of two trained law librarians and a staff of assistants, now exceeds 70,000 volumes.

The students of the School of Law are regularly enrolled in the University, enjoy all the educational privileges of University students, and are amenable to all general University regulations and to the special regulations of the School.

The summer session of the School of Law offers opportunities for students to supplement the work of the regular year by additional courses, some of which are not otherwise available, or to shorten the period of study for the law degree. The summer faculty normally includes as visiting professors distinguished law teachers from other universities.

Opportunities for individual work are afforded to especially qualified students through membership on the student editorial staff of the *North Carolina Law Review,* as faculty research assistants, and as library assistants.

For further information, write to the Dean of the School of Law for the separate bulletin of that school.

THE SCHOOL OF MEDICINE

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ERNEST HARVEY WOOD, B.A., M.D., *Professor of Radiology*

Committee on Admissions

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Historical Background

The School of Medicine was established in 1879 under the direction of Dr. Thomas W. Harris. A course in theoretical and practical medicine was offered under the preceptorial system, but the plan was found impracticable and was abandoned in 1886. In 1890, a more orderly and logical arrangement of the subjects in the medical course having developed, it became possible for an institution without clinical facilities to offer instruction in the preclinical subjects, and the school was reopened with Dr. Richard H. Whitehead as Dean and Professor of Anatomy. Under his guidance it soon won recognition for thoroughness of instruction and excellence in scholarship and has since continued without interruption to its growth. At first the course covered only one year, but in 1896, the medical course having been extended in the better class schools to four years, a two-year course was inaugurated. In 1900, the School of Medicine was incorporated as an integral part of the University and was reorganized to meet the requirements of the first two years of the full four-year course leading to the degree of Doctor of Medicine. In 1902, it was expanded into a four-year school, and the clinical subjects of the third and fourth years were offered in Raleigh under the direction of Hubert A. Royster as dean. After a few years of successful operation this plan had to be abandoned in 1910 for lack of financial support, and the clinical years were discontinued. The expansion now nearing completion provides again for instruction in the clinical years, this time on the campus at Chapel Hill. With the opening of the fall session in 1952 a junior class was admitted. In the fall of 1953 four classes were in training and the first class graduated in 1954. The School has received the approval of the Association of American Medical Colleges and of the Council on Medical Education and Hospitals of the American Medical Association.

Preparation and Requirements for Medicine

Students preparing for the study of medicine should spend as much time securing a well-rounded cultural education as their age and financial resources permit. If possible they should complete the regular four-year course leading to the A.B. or S.B. degree. If this is impracticable they may take the special course leading to the S.B. in Medicine, or they may take three years of academic work without the bachelor's degree in view, but with careful regard to meeting the specific requirements for admission to the School of Medicine.

Three years of accredited college work (96 semester hours) are required for admission. This period of study should include: eight or more semester hours of inorganic chemistry (qualitative and quantitative analysis); eight semester hours of organic chemistry; eight se-

mester hours of biology; eight semester hours of physics (which must have required trigonometry as a prerequisite); English—such knowledge as is ordinarily required of candidates for a degree in an approved college (usually the courses required of freshmen and sophomores); four to six courses in a modern foreign language (French, German, or Spanish), depending upon credits presented for entrance to college. In addition, courses in volumetric quantitative analysis, comparative anatomy, vertebrate embryology, modern physics, and physical chemistry are strongly recommended.

Rarely are students admitted who have completed only the minimal requirements unless their academic records are of outstanding excellence. It is especially advised that all students present more work in chemistry and zoology than the minimal requirements outlined above.

Because of the widening social and economic interests of the medical profession, students preparing to enter it should take in addition to the requirements in the sciences as many courses as possible in history, literature, economics, philosophy, and psychology.

There is not sufficient space in the medical schools to admit all students who meet the quantitative standards. For this reason, and because it requires more than average intelligence and aptitude to complete satisfactorily the medical curriculum, the quality of the student's undergraduate work is of the greatest importance. A student interested in the study of medicine should attempt to stand in the upper third of his academic class.

While a high grade of scholarship is probably the best criterion for predicting achievement in medical school, the personal qualifications of applicants are of the highest importance. Moral character is the most important prerequisite for entering the medical profession. No school wishes to train prospective physicians who lack either ethical standards or a sense of social responsibility.

All admissions are decided by a special committee on admissions, with the approval of the Dean. The maximum number admitted to the first-year class is sixty-six. The special committee reserves the right to select from the entire list of approved applicants those who in their judgment are best qualified for the study of medicine.

Candidates for admission to the second and third years of the medical curriculum must present certificates from an accredited medical school stating that they have had the fifteen high school units required for college entrance, at least three years of college work as indicated above, and have completed the subjects of the first year of the medical course as outlined.

Medical Curriculum

The course in medicine embodies a four-year curriculum. The catalogue of the School of Medicine provides a description of the courses.

Special Students

In addition to teaching medical students and graduate physicians various departments in the Medical School offer instruction to students in related professional schools and the Graduate School. Students interested in such instruction should consult the head of the department concerned.

For further information, please write to the Dean of the School of Medicine for the special catalogue of the School.

THE SCHOOL OF PHARMACY

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
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WILLIAM WHATLEY PIERSON, Ph.D., Litt.D., *Dean of the Graduate School*
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OSLER LUTHER PETERSON, B.A., M.D., M.P.H., *Director of Program Planning, Division of Health Affairs*

General Statement

Instruction in pharmacy was offered at the University in the School of Medicine and Pharmacy from 1880 to 1886 and 1890 to 1894, but very few students elected the course. Finally, in March, 1897, in response to urgent requests made by the pharmacists of the state, the present school was established, and Edward Vernon Howell was appointed Professor of Pharmacy and Dean.

The School in 1925 obtained exclusive use of its present building, Howell Hall of Pharmacy. This building contains 35 rooms and 22,000 square feet of floor space.

The minimal offerings of the School are based on four years of study which lead to the degree of Bachelor of Science in Pharmacy (S.B. in Phar.).

The School was admitted to membership in the American Association of Colleges of Pharmacy in 1917. This organization was formed for the promotion of thorough scientific work in the profession of pharmacy. It maintains high standards for membership based on the number and training of the faculty, the thoroughness of the work offered, the quality of the curriculum, the number of students, the financial support of the school, and the facilities for carrying on the work.

The School of Pharmacy of the University of North Carolina is accredited by the American Council on Pharmaceutical Education as a Class A school. The School is fully accredited by all state examining boards.

Freshmen are admitted by certificate from accredited schools or by examination. Candidates for admission as transfer students must have credit for the academic courses in the first-year curriculum in the School of Pharmacy, substituting credit in Zoology 41 for Pharmacy 1, Pharmacy 10, and Pharmacy 15. Each application for admission must be approved by the Director of Admissions of the University before the application can be considered by the Committee on Admissions of the School of Pharmacy. Applicants should appear at the School of Pharmacy for interviews with the Dean and two members of the faculty. Applications should be filed as early as possible, preferably in the period between February 1 and March 1. The fall semester, beginning in September, is the only period for which beginning and transfer students are accepted.

A student who has completed one or more years of accredited work in a recognized school of pharmacy and submits satisfactory evidence of having completed the entrance requirements and courses equivalent to those prescribed in the curriculum required for the degree of S.B. in Pharmacy may be admitted with advanced standing and proceed for this degree. The minimum requirement of residence for a degree is a period of two semesters within the period of twelve months. A full year's work comprising at least thirty semester hours must be completed by a transferring student. Beginning January 1, 1938, the American Association of Colleges of Pharmacy has required of its member colleges that students transferring from a non-pharmaceutical college must spend a minimum of three years in a standard college of pharmacy in order to be graduated with a degree of S.B. in Pharmacy.

The School of Pharmacy is compelled by its physical facilities to limit the number of beginning and transfer students.

The School of Pharmacy recognizes that its graduates may elect to pursue one or another of related but definitely different forms of pharmaceutical practice and has provided such specialized training.

Graduate degrees offered in the School of Pharmacy are administered by the Graduate School of the University of North Carolina. These degrees are Master of Science (S.M.) and Doctor of Philosophy (Ph.D.). The three majors available are pharmacy, pharmaceutical chemistry, and pharmacognosy.

For further information, please write to the Dean of the School of Pharmacy for the special catalogue of the School.

THE SCHOOL OF PUBLIC HEALTH

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
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OSLER LUTHER PETERSON, B.A., M.D., M.P.H., *Director of Program Planning, Division of Health Affairs*

General Statement

The School of Public Health is the fourth oldest professional school of its kind in the United States and one of ten North American schools accredited by the American Public Health Association. It is a member school of the University's Division of Health Affairs, which is the focal training and service point for an integrated statewide health program.

The special disciplines of public health are biostatistics, epidemiology, public health administration, health education, public health nursing, sanitary engineering, maternal and child health, parasitology, community nutrition, and mental health. Preparation of students in these special disciplines and in the subject areas basic to public health—physical, biological, and social sciences—is a major objective of the School. The final goal of instruction is the production of interdisciplinary public health teams—skilled in working together as a team and with the community for the solution of community health problems and for the long-term goal of total community health.

Toward this end many communities of the state and their agencies assist as field centers and laboratories for student-faculty teams from the professional school. For longer periods of field experience, training units have been established in twenty-nine city, county, and district health departments in North Carolina and thirteen other states.

The School of Public Health also enjoys the active cooperation of the State Board of Health at Raleigh. Members of that staff give lectures and exercises in their special fields, and students have an opportunity to observe and study at first hand the practice, methods, and materials of an efficient state level health organization. Relationships are maintained too with the Institute of Statistics at North Carolina State College in Raleigh, with Duke University and Duke Hospital in Durham, and with Watts Hospital in Durham. The staffs of the U. S. Public Health Service, the Children's Bureau, and other agencies of the U. S. Department of Health, Education, and Welfare participate in the teaching program of the School of Public Health through lectures, discussions, consultations, and research.

In addition to its academic responsibilities, represented by departments for each of the disciplines mentioned above, the School of Public Health has two other major functions: research and service to the state and region. Research is conducted by all departments and intensively by the non-academic Department of Experimental Medicine. Similarly, all departments render field service to the state, but the Department of Field Training and the Kellogg-supported Continuation Education Program turn all their attention in that direction.

Graduate degrees offered by the School of Public Health are the Master of Science (S.M.), Doctor of Philosophy (Ph.D.), and the following professional graduate degrees: Master of Science in Public Health (M.S.P.H.), Master of Public Health (M.P.H.), Doctor of Public Health (Dr.P.H.), and Master of Science in Sanitary Engineering (M.S.S.E.). All requirements concerning these degrees are administered by the faculty of the School of Public Health with the approval of the Administrative Board of the Graduate School.

An undergraduate degree, Bachelor of Science in Public Health Nursing (B.S.P.H.N.), is awarded to graduate nurses who comply with all requirements of the public health nursing course and who have had the required years and courses in college. There are also a four-year program leading to the degree of Bachelor of Science in Public Health (B.S.P.H.) and a four-year program developed cooperatively with the School of Education for the degree of Bachelor of Science in Health Education (B.S. in H.E.). The first two degrees are administered by the College of Arts and Sciences, the third, by the School of Education.

The School of Public Health administers the Certificate in Public Health (C.P.H.) and Certificate in Public Health Nursing (C.P.H.N.).

For more detailed information concerning preparation and admission requirements and proposed curricula leading to degrees, see the special catalogue of the School of Public Health.

THE SCHOOL OF DENTISTRY

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
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LESTER BODINE HIGLEY, D.D.S., M.S., *Professor of Orthodontics*
CHARLES WRIGHT HOOKER, Ph.D., *Professor of Anatomy*
GROVER CLEVELAND HUNTER, JR., A.B., D.D.S., M.S., *Professor of Periodontology and Oral Pathology*
DANIEL ALLAN MACPHERSON, Ph.D., *Professor of Bacteriology*
ROGER EDWARD STURDEVANT, D.D.S., *Professor of Operative Dentistry*

* Resignation effective June 30, 1955.

Committee on Admissions and Aptitude Testing

ROGER EDWARD STURDEVANT, D.D.S., *Chairman*
JOHN CHARLES BRAUER, A.B., D.D.S., M.Sc. MICHAEL KALEN BERKUT, Ph.D.
FRANK COLEMAN CADY, D.D.S., M.P.H.

General Statement

While the North Carolina Dental Society had given considerable thought to the organization of a School of Dentistry even as early as 1921 in the appointment of the first Dental College Committee, it was not until 1947 that a basic dental survey of North Carolina was authorized by the Society. The General Assembly of 1949, having studied the findings and recommendations of the survey, appropriated funds for the establishment of a School of Dentistry.

The new building of the School of Dentistry is an integral part of the total building program of the Division of Health Affairs, including the new Memorial Hospital, Tuberculosis Hospital, wings to the School of Medicine for the teaching of the basic sciences, School of Nursing, and the intern and residence quarters.

Dentistry in North Carolina has been given a signal opportunity to make a contribution to the health sciences in its close working relationship with the Schools of the Division of Health Affairs and the Memorial Hospital. Students of dentistry and medicine will attend comparable basic science courses, and they will be required to meet equally high academic standards in all areas.

Each class will be limited to fifty students. Priority in selection of students will be given to residents of North Carolina, and secondly, to residents of the Southeastern states.

A two- and a four-year curriculum for the training of dental hygienists was activated in the fall of 1953. Girls who have graduated from high school are permitted to enter this program for training. The two-year curriculum will lead to certification, while the four-year curriculum will lead to a bachelor's degree.

Preparation for Study of Dentistry and Requirements for Admission

Students preparing for the study of dentistry should spend as much time securing a well-rounded cultural education as their age and financial resources permit. If possible they should complete the regular four-year course leading to the A.B. or S.B. degree. If this is impracticable they may take the special course leading to the S.B. in Dentistry, or they may take three years of academic work without the bachelor's degree in view, but with careful regard to meeting the specific requirements for admission to the School of Dentistry.

Requirements for Admission

Three years of accredited college work (96 semester hours) are required for admission. This period of study should include eight or more semester hours of inorganic chemistry (including qualitative and quantitative analysis); eight semester hours of organic chemistry; eight semester hours of biology; eight semester hours of physics (which must have required trigonometry as a prerequisite); and English—such knowledge as is ordinarily required of candidates for a degree in an approved college (usually the courses required of freshmen and sophomores).* In addition, courses in volumetric quantitative analysis, comparative anatomy, vertebrate embryology, and modern physics are recommended.

Because of the widening social economic interests of the dental profession, students preparing to enter it should take, in addition to the requirements in the sciences, as many courses as possible in social science, history, literature, economics, philosophy, and psychology.

There are not sufficient facilities in the dental schools of the country to admit all students who meet the quantitative standards. For this reason, and because it requires more than average intelligence and aptitude to complete satisfactorily the dental curriculum, the quality of the student's undergraduate work is of the greatest importance.

National Aptitude Test

All prospective students must complete the National Aptitude Test, given by the Council on Dental Education of the American Dental Association, before they will be considered for admission to the School of Dentistry. This test will be given in Chapel Hill and at centers in other states at designated intervals. Additional information regarding the test may be secured when application for admission to the School of Dentistry has been completed.

Personal Qualifications

While a high grade of scholarship and digital dexterity are probably the best criteria for predicting achievement in dental school the personal qualifications of applicants are of the highest importance. Moral character is the most important prerequisite for entering the dental profession. No school wishes to train prospective dentists who lack either ethical standards or a sense of social responsibility.

* While a modern foreign language is recommended, it is not a requirement for admission to the School of Dentistry. However, all high school deficiencies must be satisfied as they pertain to admission to the University.

Dental Curriculum

The course in dentistry embodies a four-year curriculum following admission to the School of Dentistry. The catalogue of the School of Dentistry provides a description of the courses and other details pertaining to the study of dentistry.

Dental Hygiene Curriculum

A two-year curriculum leading toward a certificate and a four-year curriculum leading toward the degree of B.S. in Dental Hygiene are offered. The regular School of Dentistry catalogue gives complete information regarding curriculum, costs, and other items of information. This catalogue may be secured by writing to the Director of Dental Hygiene, School of Dentistry.

Graduate Programs

See under the Graduate School, page 159.

THE SCHOOL OF NURSING

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
HENRY TOOLE CLARK, JR., A.B., M.D., *Administrator of the Division of Health Affairs*
ELIZABETH LOUANNA KEMBLE, R.N., B.S., A.M., Ed.D., *Dean*

Advisory Board of the Division of Health Affairs

WALTER REECE BERRYHILL, A.B., M.D., *Dean of the School of Medicine*
JOHN CHARLES BRAUER, A.B., D.D.S., M.Sc., *Dean of the School of Dentistry*
EDWARD ARMOND BRECHT, Ph.D., *Dean of the School of Pharmacy*
ROBERT RANDALL CADMUS, A.B., M.D., *Director of the North Carolina Memorial Hospital*
HENRY TOOLE CLARK, JR., A.B., M.D., *Administrator of the Division of Health Affairs*
ELIZABETH LOUANNA KEMBLE, R.N., B.S., A.M., Ed.D., *Dean of the School of Nursing*
EDWARD GRAFTON MCGAVRAN, A.B., M.D., M.P.H., *Dean of the School of Public Health*
OSLER LUTHER PETERSON, B.A., M.D., M.P.H., *Director of Program Planning, Division of Health Affairs*

General Statement

The School of Nursing offers a four-year curriculum leading to the degree Bachelor of Science in Nursing. The program of studies is designed to provide well-organized learning experiences leading to the graduation of students who have acquired the necessary knowledges, skills, attitudes, and appreciations to function effectively as professional nurses.

The program of studies covers two academic and two calendar years. The courses in nursing begin in the freshman year with the understandings essential to maintenance of health and prevention of disease, and later include nursing care of the sick. Students are assigned to clinical experience in selected areas of the hospital and in a variety of institutions and agencies throughout the state concerned with the maintenance of health.

The School of Nursing also provides opportunity for graduate nurses of a diploma program to receive comparable preparation. The length of this program is determined on an individual basis, depending in part upon previous preparation, experience, and the results of graduate nurse qualifying examinations.

Classes are admitted in the fall semester each year.

Requirements for Admission

Applicants must first meet the requirements for admission to the University. Academic admission requirements of the University and the School of Nursing include the following:

Subjects	*Units*	
English	4	
Foreign Language	2	(one language)
Algebra	1½	
Plane Geometry	1	
Social Science	2	(one unit to be United States History)
Natural Science	1	(Chemistry, including laboratory, preferred)
Physics, Biology or General Science	1	
Electives	2½	
	15	

Variations from the above requirements will be considered on an individual basis.

Applicants who have had one or more years of college work and who wish to be considered for admission to the University of North Carolina School of Nursing should write for further information. Students applying for advanced standing are required to present evidence of satisfactory academic achievement while in college. After evaluation of the student's college transcript, it is possible that the applicant may qualify for admission to the second year of the program. It is necessary that arrangements be made with the Dean of the School of Nursing to take work during the summer session in order to start the second year without deficiencies.

In addition to satisfactory academic achievement, applicants are required to present evidence of physical and emotional fitness for nursing, and the ability to get along with people.

Students between the age of 17 and 25 are eligible for admission to the University of North Carolina School of Nursing. Younger or older applicants will be considered on an individual basis. Eligibility for admission of graduate nurses will also be considered on an individual basis.

Further information may be obtained by writing to the Dean of the School of Nursing.

THE SCHOOL OF SOCIAL WORK

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
WILLIAM WHATLEY PIERSON, Ph.D., Litt.D., *Dean of the Graduate School*
ARTHUR EMIL FINK, Ph.D., M.S.W., *Dean*

*†The Administrative Board

ROBERT RANDALL CADMUS, A.B., M.D., *Director of the North Carolina Memorial Hospital* (1955)
ARNOLD KIMSEY KING, Ph.D., *Professor of Education and Associate Dean of the Graduate School* (1955)
GORDON W. BLACKWELL, Ph.D., *Professor of Sociology and Director of the Institute for Research in Social Science* (1956)
HENRY PARKER BRANDIS, JR., A.B., LL.B., LL.D., *Dean of the School of Law* (1956)
LEE MARSHALL BROOKS, Ph.D., *Professor of Sociology and Research Professor in the Institute for Research in Social Science* (1957)
GEORGE ALEXANDER HEARD, Ph.D., *Professor of Political Science and Research Professor in the Institute for Research in Social Science* (1957)
SIDNEY SHAW CHIPMAN, B.A., M.D., M.P.H., *Professor of Maternal and Child Health* (1958)
WILLIAM LEROY FLEMING, B.A., M.S., M.D., *Professor of Preventive Medicine* (1958)
EARL EMMETT BAUGHMAN, Ph.D., *Associate Professor of Psychology* (1959)
HARRY DEMERLE WOLF, Ph.D., *Professor of Economics* (1959)

General Statement

The School of Social Work has developed from an earlier School of Public Welfare which was established in 1920 in accordance with the University's policy of meeting the varying needs of the state and the Southern region. In 1931 the School of Public Administration enlarged and extended the program for the training of qualified persons for public positions. An essential division within that school was the Division of Public Welfare and Social Work. In 1936 the Division of Public Welfare and Social Work became a Division of the Graduate School and in 1950, by action of the Board of Trustees, it was named the School of Social Work. The School of Social Work is an accredited member of the Council on Social Work Education. Its program for the training of psychiatric social workers is approved by the American Association of Psychiatric Social Workers.

The School of Social Work consistently has emphasized sound training for the operation of the social services, whether those services are under public or private auspices. However, by reason of the nature of many of the problems in non-urban areas, there has been

* The Chancellor, the Director of Admissions, and the Dean of Student Affairs are ex officio members of the Board.
† Dates indicate expiration of terms.

special reference to the unique opportunities for training workers for services in those areas.

Opportunity is offered for concentration, in the second year of the master's program, in public assistance, child welfare (including foster care, adoption and institutions), family counseling, psychiatric social work, medical social work, and the correctional services such as casework in prison, and courts. Training in social agency administration is available as well as for community welfare organization and social welfare research.

The work offered leads to the degree Master of Social Work. The applicant must have received a bachelor's degree from a college or university of recognized standing, with eighteen semester hours in the social sciences, including anthropology, economics, history, political science, psychology, and sociology, at least six semester hours of which must be in advanced courses in one of these fields.

The master's degree is based upon two semesters and a half of the summer quarter in the first year, and a half of the summer quarter followed by two semesters in the second year. One semester of the first year and one semester of the second year are in field work instruction in an approved welfare agency. Admission to the first year is in September. The second year program begins in mid-July and is completed the following June.

The School of Social Work is located in Alumni Building.

The students in the School of Social Work are regularly enrolled in the University and are amenable to all general University regulations and to the special regulations of the School.

For further information, please write to the Dean of the School of Social Work for the separate bulletin of that School.

THE SCHOOL OF LIBRARY SCIENCE

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
WILLIAM WHATLEY PIERSON, Ph.D., Litt.D., *Dean of the Graduate School*
LUCILE KELLING, A.B., B.L.S., *Dean*

*The Administrative Board

CARLYLE JAMES FRAREY, A.B., M.S., *Associate Professor of Library Science*
WERNER PAUL FRIEDERICH, Ph.D., *Professor of German and Comparative Literature*
FLETCHER MELVIN GREEN, Ph.D., *Kenan Professor of History and Research Professor in the Institute for Research in Social Science*
MARGARET ELLEN KALP, B.A., M.A. in L. S., *Assistant Professor of Library Science*
LUCILE KELLING, A.B., B.L.S., *Dean and Professor of Library Science*
SARAH REBECCA REED, A.B., M.A. in L.S., *Assistant Professor of Library Science*
PAUL WOODFORD WAGER, Ph.D., *Professor of Political Science*

General Statement

The School of Library Science opened in September, 1931, as a unit of the University of North Carolina. Made possible by a grant from the Carnegie Corporation, it is the culmination of a series of library science courses offered in the summer and regular terms since 1904. The School is accredited by the American Library Association and the Southern Association of Colleges and Secondary Schools.

Quarters for the School, comprising rooms for laboratory work, lectures, and seminars, a stack area for the School's library, and offices for the teaching and administrative staff, cover the entire top floor of the west wing of the University Library.

The town school system maintains a high school library and an elementary school library available for observation. Within driving distance of from thirty minutes to two hours are the State Library; the Library Commission headquarters; the school and public library systems of Durham, Raleigh, and Greensboro; and the libraries of Duke University, The North Carolina State College of Agriculture and Engineering and the Woman's College of the University of North Carolina.

The School offers four programs: an eighteen-semester-hour undergraduate program for students interested in preparing for positions as teachers *and* librarians in the smaller public schools; a basic one-year program for college graduates preparing for beginning positions; and two masters' programs, one for public school librarians and one for work in any type of library.

* The Chancellor, the Director of Admissions, and the Dean of Student Affairs are ex officio members of the Board.

Applicants should plan to enter the School at the beginning of the fall semester or summer session in order to insure a full program of work. Many courses have prerequisites which cannot be taken unless the curriculum is begun at one of these times.

A bachelor's degree from an approved college or university is required for admission to all of the programs leading to a degree. A reading knowledge of modern languages is essential to satisfactory work in many types of libraries and very desirable in others. Latin is important as a basis for other languages.

Eighteen semester hours in an approved library science program is a prerequisite for admission to the programs for the degrees of Master of School Librarianship and Master of Science in Library Science.

A minimum residence of two semesters in the University of North Carolina is required for any degree. Students who are admitted with advanced standing in library science must complete in the School or in another division of this institution an equivalent number of courses approved by the Dean. All work credited toward a degree must be completed within a period of six years.

All requirements concerning these degrees are administered by the faculty of the School of Library Science and the requirements for the masters' degrees are administered by the faculty of the School with the approval of the Administrative Board of the Graduate School.

On the completion of a curriculum in the School of Library Science the University will grant the degree of Bachelor of Science in Library Science, Master of School Librarianship, or Master of Science in Library Science.

The courses of the regular session are repeated in the summer session. The same requirements apply as in the regular session.

The present demand for professional librarians is unusually great. Requests are received almost daily from various types of libraries in this country and overseas for recommendations for all sorts of positions. Although the School cannot guarantee positions for its graduates it assists them not only in securing their first positions, but in advancing to other positions later.

Application for admission to the School for either the regular session or the summer session should be made as far in advance as possible of the session to be attended. Application should be made on forms which are secured from the *Admissions Officer, School of Library Science, The University of North Carolina, Chapel Hill, N. C.*

For further information regarding the undergraduate courses see Department of Library Science, Part IV; for the graduate courses see the special catalogue of the School.

Part Four

ACADEMIC DEPARTMENTS

DESCRIPTION OF COURSES

In this section are listed and described all courses offered in the regular sessions of the University except those in the professional schools of Law, Medicine, Dentistry, Nursing, Pharmacy, Public Health, Library Science, and Social Work. For courses in these schools see the special bulletins.

The requirements for majors are shown, after the faculty lists, in connection with the materials concerning the various departments.

The work of the University, except in the Schools of Medicine and Dentistry, is arranged and offered on the semester system, the regular session being divided into two approximately equal parts called the fall and spring semesters. The summer session is divided into two terms.

Work is valued and credited toward degrees by semester hours, one such hour being allowed for each class meeting a week for a semester, laboratory or field work counting one hour for each two hours of work in laboratory or field, and work in studio (art) counting one hour for each three hours. In the following announcements of courses the numbers in parentheses following the descriptive titles show the credits allowed in semester hours. Except in the case of courses meeting regularly three time a week, the number of actual hours a course meets will be found in the description of the course. The meetings of a few advanced courses, however, are arranged by the professor in charge.

In the event that required freshman subjects are taken after a student begins his junior year or required sophomore subjects after he begins his senior year, such subjects carry half credit only.

Courses numbered from 1 through 99 are for undergraduates only; those numbered from 100 through 199 are for advanced undergraduates and graduates; those numbered from 200 to 400 are for graduates only. Courses in chemistry for undergraduates are grouped by decades under the headings inorganic, analytical, organic, etc. Undergraduates may not take courses numbered above 200 except by special permission of the instructor in the course and the chairman of the department. Permission must also be secured from the Dean of the Graduate School and the dean of the college involved. Courses numbered from 1 to 100 carry no credit toward any advanced degree.

DEPARTMENT OF AIR SCIENCE

Professor: G. J. SMITH, *Colonel,* USAF
Associate Professor: M. T. ORR, *Lieutenant Colonel,* USAF
Assistant Professors: THOMAS T. GILCHRIST, *Major,* USAF; J. O. YOUNG, *Major,* USAF; J. A. SCHOFIELD, *Captain,* USAF; JOSEPH GERRITY, *Captain* USAF; R. A. GRAY, *First Lieutenant,* USAF
Instructor: MARION W. HUDSON, *Master Sergeant,* USAF
Administrative: R. C. PUCKETT, *Master Sergeant,* USAF; C. W. CLIFFORD, *Master Sergeant,* USAF; B. F. RIDDLE, *Technical Sergeant,* USAF; M. N. WILSON, *Staff Sergeant,* USAF; DUDLEY B. STALLINGS, *Staff Sergeant,* USAF
Supply: LESTER STROUD, *Technical Sergeant,* USAF; JOHN W. HAWK, *Staff Sergeant,* USAF

General Information

The Air Force R. O. T. C. unit constitutes a regular department of instruction within the University. It is known as the Department of Air Science. Academic credits toward degrees are allowed, as in other departments.

Air Force Commissions

Cadets successfully completing the requirements for a degree and the Air Force R. O. T. C. course of instruction are commissioned Second Lieutenants in the United States Air Force Reserve. All who are commissioned, with the exception of Veterans, are then called to active duty. After one year of active duty, they may apply and compete for Commissions in the Regular Air Force.

Emoluments

Advanced students (third and fourth year) are allowed a monetary allowance in lieu of rations which amounts to a total of approximately $525.00. This is in addition to uniforms, books, and training equipment, all of which are furnished the students at government expense. For attendance at summer camp students receive in addition approximately $105.00.

Course of Instruction

Air Force R. O. T. C. is divided into two phases, the basic course during the freshman and sophomore years, and the advanced course during the junior and senior years. Qualifications for admission to the basic phase are not difficult to meet. However, admission to the advanced phase is by selection. Standards are high and cadets with the better academic and leadership records who are qualified to fly, and desire to fly, are given first consideration. The generalized curriculum is designed to train junior officers for the Air Force. Graduates of the program may undertake specialized training after they have been called to active duty.

Basic Course

Male students in the freshman class who are physically qualified, American citizens, and not yet 24 years of age, may take the basic courses in Air Science as a requirement toward graduation. Credit may be allowed for six months or more of honorable service in the Army, Navy, Marine Corps, or Coast Guard.

Advanced Course

The advanced course consists of two years of instruction and a summer camp which will normally come between the first and second years of the advanced course, i.e., between the junior and senior years. A student must have completed the basic course, or have had twenty-four months honorable active service in the Army, Navy, Marine Corps, or Coast Guard to be eligible for enrollment in the advanced course and must:

a. not have reached 26 years of age at the time of initial enrollment;
b. be physically fit as evidenced by a physical examination;
c. successfully accomplish an Officer Qualification Test;
d. have at least four academic semesters to complete before graduation;
e. be pursuing a normal four-year course with the intention of securing a degree;
f. sign an agreement (contract) in writing to complete the course;
g. be in good academic standing with the University.

Academic Credits

Cadets who successfully complete the Air Science courses are granted 24 semester hours credit. This credit may be substituted for five of the courses required for the degree as follows: one elective course in the General College and four elective courses in the upper colleges.

Cadets are advised to consult their advisers and deans or department heads concerning appropriate substitutions.

Grading System

The status of each student in the Air Force R. O. T. C. is that of an officer candidate. Evaluation of his abilities is not based entirely on the grade he is awarded for classroom recitations, oral or written, but includes his attitude and ability as a leader during the practical drill periods. A student's potential value as a leader is demonstrated to an important degree by his response to the entire scope of military instruction and military procedure as portrayed by his interest, conduct, alertness, orderliness, classroom and drill attendance, neatness, care of his uniform and equipment, and similar related matters.

The student's final grade is based on an evaluation of those attributes combined with his academic standing.

Texts and Equipment

The federal government provides all necessary texts and equipment to carry out the Air Force R. O. T. C. program.

Uniforms

Uniforms for all enrollees are furnished by the government. The uniform is similar to that prescribed for officers in the regular service and consists of both summer khaki and winter wool, including coats, shoes, and all accessories.

Uniforms must be worn at specified drill periods and may be worn at other classes and exercises.

Enrollment and Continuance Requirements

The general requirements for enrollment and continuance in the Air Force R. O. T. C. are that the student be a citizen of the United States, be physically qualified as prescribed by the Department of the Air Force, execute a DD Form 98 "Loyalty Certificate for Armed Forces Personnel," be accepted by the institution as a regularly enrolled student, be under 24 years of age at the time of enrollment in the basic course, and that he successfully complete such general survey or screening tests as are given to determine eligibility for admittance to advanced courses. A student entering with advanced standing by reason of one year's military service may enroll at an age which will enable him to complete all requirements for a commission before his twenty-eighth birthday. Enrollees in the advanced course must agree to complete the course of instruction offered unless relieved by the Department of the Air Force.

Deferment

A quota for deferment from induction into the armed services is assigned each year to the Air Force R. O. T. C. at this University. These deferments are allotted to individual enrollees who maintain satisfactory grade averages. Such deferred students are exempt from service in the armed forces while pursuing the Air Force R. O. T. C. program and, in general, until graduation from the University.

Summer Camp

The advanced camp consists of a four to six-week period of intensive applicatory training in general and specialized military and Air Force fields, and normally is attended by the advanced course student during the summer—between the two academic years of the course. Attendance at summer camp will be considered an integral part of the A.F.R.O.T.C. course of instruction offered the first semester of the senior year.

Curriculum

BASIC COURSE

AS 101-102. NATIONAL DEFENSE AND THE AIR FORCE (2 each). No credit will be given for AS 101 until 102 is completed.

Details of the A. F. R. O. T. C. program; moral and statutory obligations for military service; introduction to aviation; fundamentals of global geography; international tensions and security structures; instruments of national military security; drill—basic military training.

Two lecture and two laboratory hours a week, 101, *fall;* 102, *spring.*

AS 201-202. ELEMENTS OF AERIAL WARFARE (2 each). No credit will be given for AS 201 until 202 is completed.

The purposes, process, and primary elements of aerial warfare; targets, weapons, delivery aircraft, bases, and operations; purpose and provisions of the USAF Officer Career Program; survey of occupational fields open to USAF officers; opportunities for and obligations of a career in the USAF as an officer; cadet noncommissioned officer training.

Two lecture and two laboratory hours a week, 201, *fall;* 202, *spring.*

ADVANCED COURSE

AS 301, 302. APPLIED AIR SCIENCE AND TECHNIQUES (4 each).

The Air Force Commander and his staff; problem solving techniques; the communications process; military law, courts and boards; applied air science; air force base functions; higher cadet noncommissioned officer training.

Four lecture and two laboratory hours a week, 301, *fall;* 302, *spring.*

AS 401, 402. LEADERSHIP AND AIRPOWER CONCEPTS (4 each).

Leadership seminar; career guidance; military aspects of world political geography; military aviation and the art of war; briefing for commissioned service; cadet commissioned officer training.

Four lecture and two laboratory hours a week, 401, *fall;* 402, *spring.*

Drill and Exercise of Command

All laboratory hours, throughout the course of instruction in both Basic and Advanced Air Science, are devoted to drill and exercise of command. This involves instructions and student participation in the following subjects: drill, military customs, courtesies, leadership, character development, *esprit de corps,* discipline, group action, morale, continuous training in command and staff functions, and other phases of other officer responsibility.

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*DEPARTMENT OF ANATOMY

Professors: C. W. HOOKER, W. C. GEORGE
Visiting Professor: T. L. PEELE
Associate Professors: C. D. VAN CLEAVE, C. T. KAYLOR
Visiting Associate Professor: J. SZEPSENWOL
Assistant Professor: J. A. GREEN
Instructors: IRA FOWLER, W. E. DOSSEL, P. P. VAUGHN

* This is also a department in the School of Medicine which operates on the quarter system. Therefore, some of its courses are taught by the quarter. The credit in parentheses after the course title is in semester hours.

Course for Undergraduates

41. INTRODUCTORY HUMAN ANATOMY (3).
A general course to meet the needs of persons preparing for careers as dental hygienists or X-ray technicians.
Two lecture and two laboratory hours a week, fall semester. Laboratory fee, $3.00. Messrs. Fowler and Green.

Courses for Graduates and Advanced Undergraduates

101. CENTRAL NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE (4 2/3).
Four lecture and six laboratory hours a week, spring quarter. Laboratory fee for non-medical students, $5.00. Messrs. Peele and Green.

102. GENERAL HISTOLOGY AND ORGANOLOGY (5 1/3).
Four lecture and eight laboratory hours a week, fall quarter. Laboratory fee for non-medical students, $5.00. Messrs. Dossel, Fowler, Hooker.

103. EMBRYOLOGY (2 2/3).
Two lecture and four laboratory hours a week, spring quarter. Laboratory fee for non-medical students, $5.00. Messrs. George and Dossel.

104. CYTOLOGY AND HISTOGENESIS (4). Prerequisites, Anatomy 102, Anatomy 103.
Three lecture and six laboratory hours a week, spring quarter. Laboratory fee for non-medical students, $5.00. Mr. George.

105ab. ANATOMY (10).
Three lecture and nine laboratory hours a week, fall and winter quarters. Laboratory fee for non-dental students, $15.00. Messrs. Kaylor and Vaughn.

106. HISTOLOGY AND ORGANOLOGY (6 2/3).
Five lecture and ten laboratory hours a week, fall quarter. Laboratory fee for non-dental students, $5.00. Messrs. George and Green.

107ab. GROSS ANATOMY (12 2/3).
Four lecture and eleven laboratory hours a week, fall and winter quarters. Laboratory fee for non-medical students, $15.00. Messrs. Van Cleave, Szepsenwol, Hooker.

Courses for Graduates

201. COMPARATIVE HEMATOLOGY (4).
Time to be arranged. Mr. George.

207. REGIONAL ANATOMY (2 or more).
Time to be arranged. Staff.

310. RESEARCH (2 or more).
Staff.

ANTHROPOLOGY
(See Sociology and Anthropology)

ARCHAEOLOGY
(See Classics)

DEPARTMENT OF ART

Professors: *J. V. ALLCOTT, KENNETH NESS, CLEMENS SOMMER
Associate Professor: GEORGE KACHERGIS
Assistant Professor: ROBERT HOWARD
†Visiting Lecturers: WILLIAM L. BAUMGARTEN, ROBERT M. BRODERSON, EDGAR F. THORNE
Curator: LYNETTE WARREN
Gallery Assistants: ‡DOROTHY HIATT, WILLIAM MANGUM
Library and Gallery Assistant: †ELEANOR DRISCOLL
Graduate Assistants: RITA KEELER, EDGAR THOMAS BRAME, II

Courses in art are for art majors and for general students in the University. Courses for art majors are planned to give the student a basic art training in studio work and art history within the liberal arts program and also to lay the foundations for graduate work. Courses for general students provide an opportunity to study art for its broadening value in the liberal arts program. The study of art at the University is facilitated by books and photographs in Person Hall Art Library and by exhibitions in Person Hall Art Gallery and in the Morehead Building.

Course leading to the A.B. degree with art as a major. In the freshman year take Art 44 and 46. In the sophomore year take four Art courses including Art 48, 55, 41 or 42 or 43. These art courses are counted as the sophomore electives of the Art student. Art courses taken in the junior and senior years permit concentration in art history, art education, painting, sculpture or graphic design.

For graduate programs in art history, creative work, or art education, see the Graduate School catalogue.

The Department of Art reserves the privilege of keeping examples of the work of any student.

As a part in the program of the study of art are student group trips to art galleries. The cost for these trips is $20 to $30.

For courses in ancient art see the Department of Classics.

Courses for Undergraduates

The following three courses are introductions to the history and interpretation of art, tracing the three arts throughout Western civilization. For general students in the University. Each course may be taken separately.

41. HISTORY AND INTERPRETATION OF ARCHITECTURE (3).
Spring. Messrs. Allcott, Baumgarten.

42. HISTORY AND INTERPRETATION OF SCULPTURE (3).
Fall. Mr. Sommer.

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* Absent on leave, spring semester, 1955.
† Spring semester, 1955.
‡ Fall semester, 1954.

43. HISTORY AND INTERPRETATION OF PAINTING (3).
Spring. Mr. Sommer.

The two courses immediately following are available for the general student to give him an approach to art through work in the studio. Each course may be taken independently.

44. APPROACHES TO DRAWING AND PAINTING (3).
An introduction to the structural elements of a picture. Black, white, and color using various media. Problems in still life, landscape, and the figure.
Six studio hours a week, fall and spring. Laboratory fee, $12.00. Messrs. Kachergis, Howard.

46. APPROACHES TO SCULPTURE (3).
An introduction to three-dimensional design in materials such as clay, plaster, wood, wire. Developing basic principles of art structure.
Six studio hours a week, fall. Laboratory fee, $12.00. Mr. Howard.

48. LETTERING, LAYOUT, AND ADVERTISING DESIGN (3).
Fundamentals of lettering. Newspaper, magazine, and advertising layout. Poster design, charts, direct mail, and other art for industry. Emphasis on studio methods. Open to students in advertising, journalism, and other fields.
Eight studio hours a week, fall. Laboratory fee, $12.00. Mr. Ness.

49. DESIGN (3).
An introduction to studio methods in design with color, form, movement. Problems in textiles, furniture, display, etc.
Nine studio hours a week. Laboratory fee, $12.00. Mr. Kachergis.

50. PICTORIAL CONTINUITY (3).
Visualization and planning of film strips, exhibitions, picture books, and articles. Open to students of Public Health, Education, and other departments.
Eight studio hours a week. Laboratory fee, $12.00. Mr. Allcott.

51. MEDIEVAL ARCHITECTURE (3).
An illustrated lecture course on the great cathedrals in France, Germany, and England during the Romanesque and Gothic periods.
Mr. Sommer.

52. RENAISSANCE ARCHITECTURE (3).
A study of architecture in Italy from the fourteenth to the sixteenth century with emphasis on the revival of classic principles and form.
Mr. Sommer.

53. MODERN ARCHITECTURE (3).
An illustrated lecture course on architecture and related design in furniture and abstract art. Field trips.
Mr. Allcott.

55. ARTS AND CRAFTS (3).
Sketching and painting; clay modeling and paper sculpture; block printing; textile designs. The planning of art projects with regard to local resources.
Nine studio hours a week, fall and spring. Laboratory fee, $12.00. Messrs. Kachergis, Howard.

61. MEDIEVAL SCULPTURE (3). Prerequisite, Art 42, or permission of instructor.
A study of medieval sculpture during the Romanesque and Gothic periods, with emphasis on the sculptural decorations of the French cathedrals.
Mr. Sommer.

62. RENAISSANCE SCULPTURE (3). Prerequisite, Art 42, or permission of instructor.

Beginning with the classic revival in the thirteenth century, this course will trace the Renaissance idea in sculpture from the Pisanos to Michelangelo.

Mr. Sommer.

70. AMERICAN ART (3).

From colonial times to the present.

Mr. Allcott.

71. ITALIAN RENAISSANCE PAINTING (3).

A study of painting in Italy during the fifteenth and sixteenth centuries and its significance for the cultural development.

Fall. Mr. Sommer.

74. BAROQUE PAINTING IN THE NETHERLANDS (FLANDERS AND HOLLAND) (3). Prerequisite, Art 43, or permission of instructor.

This course will be centered on the two great masters, Rubens and Rembrandt, with special stress on their different interpretations of the Baroque idea.

Spring. Mr. Sommer.

75. CONTEMPORARY ART (3).

Expressionism, abstract art, superrealism, and other developments in the twentieth century. Special study of such artists as Matisse and Picasso.

Spring. Messrs. Allcott, Thorne.

Education 77. MATERIALS AND METHODS FOR THE TEACHING OF ART (3).

Two lecture and six studio hours a week, first half of spring semester. Mr. Kachergis.

Education 80. PRACTICE TEACHING OF ART (6).

Second half of spring semester. Mr. Kachergis.

81. COMPOSITION (3). Prerequisite, Art 44.

Representational and abstract composition. The pictorial unit from linear structure through area relationships to three-dimensional form. Emphasis on line, tone, and texture in charcoal, pencil, pen, water color, and gouache.

Nine studio hours a week, fall. Laboratory fee, $12.00. Mr. Ness.

82. PAINTING AND PICTURE STRUCTURE (3). Prerequisite, Art 44.

Still life, figure, landscape, and abstract painting. Emphasis on structure in line, plane, and volume; tone, area, and color in water color, gouache, and oils. Projects ranging to mural size.

Nine studio hours a week, fall and spring. Laboratory fee, $20.00. Mr. Ness.

84. CERAMIC DESIGN (3). Prerequisite, Art 46.

Approaches to form design; the function of decorative processes such as color slips, sgraffito and glazing; firing.

Eight studio hours a week, fall. Laboratory fee, $12.00. Mr. Howard.

85. ADVERTISING ART (3). Prerequisite, Art 48.

Figurative and abstract illustration and design of posters, book jackets, visual aids, exhibitions, and other graphic presentation work in black and white and color. Experimentation and development of personal professional methods.

(1955-1956 and alternate years.) *Eight studio hours a week, spring. Laboratory fee, $15.00.* Mr. Ness.

86. SCULPTURE, CAST AND CARVED (3). Prerequisite, Art 46.

Casting of plaster, cement, stone; and carving in wood, stone, etc. Emphasis on the potential of solids in three-dimensional design.

Eight studio hours a week, spring. Laboratory fee, $12.00. Mr. Howard.

Courses for Graduates and Advanced Undergraduates

105. ADVANCED PAINTING AND PAINTING PROCESSES (3). Prerequisites, Art 81, 82, or instructor's permission.

Water color, tempera, gouache, oil, and synthetic mediums. Preparation of canvas and gesso panels. Consideration of line, tone, and form in figure, still life, and landscape in representational and abstract forms.

Nine studio hours a week, fall. Laboratory fee, $22.50. Mr. Ness.

106. ADVANCED COMPOSITION AND PAINTING (3). Prerequisites, Art 81, 82, or instructor's permission.

Line design, flat pattern, volume and space composition. Exploration of visual and tactile potentials in representational and non-objective picture structure. Emphasis on development of personal methods. Work in all mediums.

Nine studio hours a week, spring. Laboratory fee, $22.50. Mr. Ness.

108. ILLUSTRATION AND PICTORIAL COMPOSITION (3). Prerequisite, instructor's permission.

Projects in various mediums stemming from and expanding upon student's past and current work in other advanced classes.

Nine studio hours a week, by arrangement. Laboratory fee, $15.00. Messrs. Ness, Kachergis, Howard.

110. LIFE DRAWING (3). Prerequisite, consent of the instructor.

Work from the living model: pencil, chalk, crayon, ink. Consideration of anatomy and composition. May be taken two times for credit.

Nine studio hours a week, spring 1955. *Laboratory fee, $15.00.* Messrs. Broderson, Ness.

111. SCULPTURE, CONSTRUCTED AND APPLIED MATERIAL (3). Prerequisite, Art 46.

Construction with wood, metal, cardboard, etc.; and design through building directly in plaster, cement, etc. Emphasis on organization of space as form.

Eight studio hours a week, fall. Laboratory fee, $15.00. Mr. Howard.

112. ADVANCED SCULPTURE (3). Prerequisites, Art 86, 111.

Eight studio hours a week, spring. Laboratory fee, $15.00. Mr. Howard.

120, 121. GRAPHIC ARTS (3 each). Prerequisite, consent of the instructor.

Laboratory fee, $22.50. Messrs. Kachergis and Ness.

150. PICTORIAL CONTINUITY. FILM STRIPS, SLIDE TALKS, PICTURE PUBLICATIONS (3). For students of Art and Education. Prerequisite, six semester hours of studio work.

Eight studio hours a week, fall, 1954. *Laboratory fee, $12.00.* Mr. Allcott.

170. IMPRESSION AND POSTIMPRESSIONISM (3).

This course, beginning with neoclassicism and romanticism, accents later nineteenth-century developments in France and such painters as Manet, Renoir, Cezanne, Van Gogh.

Fall. Mr. Allcott.

171. FLORENTINE PAINTING (3). Prerequisite, Art 43.

This course will deal with the development of Renaissance painting in Florence from the late thirteenth century to the beginning of the sixteenth century.

Fall. Mr. Sommer.

174. FIFTEENTH-CENTURY PAINTING IN NORTHERN EUROPE (3). Prerequisite, Art 43.

After a brief discussion of the roots of naturalism in Flemish painting, the early masters from the Van Eycks to Breughel will be discussed.

Mr. Sommer.

177. ORIGINS OF EUROPEAN ENGRAVING AND WOODCUT (3). Prerequisite, Art 42 or 43.

After tracing the origins and technique of engraving and woodcut, their interrelations with painting and sculpture will be discussed, with emphasis on the development in Germany.

Spring, 1956. Mr. Sommer.

Courses for Graduates

*240. PAINTING (3 or 6).

Eighteen studio hours a week. Laboratory fee, $30.00. Messrs. Kachergis, Ness.

*241 SCULPTURE (3 or 6).

Eighteen studio hours a week. Laboratory fee, $30.00. Mr. Howard.

*242. GRAPHIC ARTS (3 or 6).

Eighteen studio hours a week. Laboratory fee, $30.00. Messrs. Kachergis, Ness.

*243. GRAPHIC DESIGN (3 or 6).

Eighteen studio hours a week. Laboratory fee, $30.00. Messrs. Allcott, Ness.

253. MODERN ARCHITECTURE (3).

Mr. Allcott.

261. LATE GOTHIC SCULPTURE (3). Prerequisites, Art 42 and 61.

Sculpture in Germany, the Netherlands, France, and Scandinavia in the fifteenth and sixteenth centuries. The relation between sculpture and contemporaneous painting and graphic art will be discussed.

Fall, 1955. Mr. Sommer.

270. STUDIES IN MODERN PAINTING (3).

Fall. Mr. Allcott.

271. VENETIAN PAINTING (3). Prerequisites, Art 43 and 71.

The course will be concerned principally with Renaissance painting (from Bellini to Tintoretto) and will conclude with a discussion of eighteenth-century masters (Tiepolo and Guardi).

Fall, 1954. Mr. Sommer.

272. NORTHERN PAINTING (3). Prerequisites, Art 43 and 71.

After an introductory discussion of medieval painting, the course will trace the beginning of the new painting in the Netherlands and its spread over the North-European countries.

Mr. Sommer.

274. BAROQUE PAINTING IN ITALY AND FRANCE (3). Prerequisites, Art 43 and 71 or 74.

After a discussion of Mannerism, the Baroque idea will be traced through the French Classicists and the Italian Naturalists to the eighteenth-century masters, Watteau and Fragonard, Tiepolo and Guardi.

Spring, 1955. Mr. Sommer.

301. RESEARCH (3 or 6).

A research course in a special field under the direction of a member of the department.

ASTRONOMY

(See Physics)

* Each course is offered for a total of twelve semester hours.

*DEPARTMENT OF BACTERIOLOGY AND IMMUNOLOGY

Professor: D. A. MACPHERSON
Associate Professors: W. J. CROMARTIE, G. P. MANIRE
Assistant Professor: W. R. STRAUGHN
Instructors: M. HUPPERT, J. H. SCHWAB, LOUISE WARD
Research Associate: JANET J. FISCHER
Research Assistants: JOHN CAZIN, BRITA TATE
Graduate Assistants: GLAYDIS BASINGER, ERMOFILE CONSTANTINIDES, CHARLES MCFARLAND, EDWARD SHARPLESS
Technicians: TEFTA ZOGRAFI, JANE CARTER, MODENA BLACKWELDER

For the S.B. degree with major in bacteriology, five courses (or twenty semester hours) in bacteriology are required. One course in parasitology may be substituted for one of the required courses in bacteriology. In addition, four courses in allied sciences and four courses outside the Division of Natural Sciences are required. A suggested program of study follows:

FIRST YEAR

Chemistry 11-21
English 1-2
Mathematics 7, 8 (or 15, 16)
French or German 3-4 (or 1-2 if student lacks adequate preparation)
Social Science 1-2
Hygiene 11
Physical Education 1, 2

SECOND YEAR

English 21
French or German 21
Chemistry 43
Botany 41
Zoology 41, 42
Physical Education 3, 4
Electives: One course chosen from the humanities courses in the list of sophomore electives on page 120 and two additional courses from any of the courses in this list.

THIRD YEAR

Physics 24-25
Bacteriology 51
Chemistry 61, 64
Electives, †four courses

FOURTH YEAR

Bacteriology 132
Bacteriology 112
Bacteriology, two of the following: Bact. 104, 106, 115, 120.
Electives, †three courses

* This is also a department in the School of Medicine which operates on the quarter system. Therefore, some of its courses are taught by the quarter. The credit in parentheses after the course title is in semester hours.

† Four of the seven elective courses must be outside the Division of Natural Sciences.

Courses for Undergraduates

51. ELEMENTARY BACTERIOLOGY (4). Required for pharmacy students. Prerequisites, Chemistry 11-12 or 11-21.

Covers the general principles and techniques of bacteriology and the relations of these organisms to sanitation, agriculture, medicine and industry.

Two lecture and four laboratory hours a week, spring semester. Laboratory fee, $4.00. Mr. Schwab.

55. ELEMENTARY PATHOGENIC MICROBIOLOGY (5). Required for nursing students; other students by permission of the department. Prerequisites, Chemistry 11-12 or 11-21.

A course covering the fundamental principles of microbiology; the relation of microorganisms to disease; modes of infection; and the etiologic agents of the important infectious diseases.

Three lecture and four laboratory hours a week, fall semester. Laboratory fee, $4.00. Mr. Huppert.

Courses for Graduates and Advanced Undergraduates

101ab. PATHOGENIC BACTERIOLOGY (8 2/3). Required for medical students; other students by permission of the department. Prerequisite, Bacteriology 51 or equivalent.

A detailed study of the important bacteria, fungi, rickettsiae and viruses producing human disease including host parasite relationships and the principles of immunology. Laboratory exercises illustrate important diagnostic techniques.

Three lecture, one conference, and six laboratory hours a week, fall quarter, three lecture and six laboratory hours a week, winter quarter. Both quarters must be taken consecutively to receive credit. Laboratory fee for non-medical students, $10.00. Messrs. MacPherson, Cromartie, Manire, Straughn, Huppert.

104. IMMUNOLOGY (4). Prerequisite, Bacteriology 101ab or 132.

Lecture and laboratory designed to study immunological principles by various *in vivo* and *in vitro* techniques. Emphasis is on quantitative immunochemistry and the chemical and physical methods used in this field.

Two lecture and four laboratory hours a week, spring semester. Laboratory fee, $10.00. Mr. Schwab.

106. MEDICAL MYCOLOGY (4). Prerequisites, Bacteriology 101ab or 132 or equivalent; Botany 102 is advisable.

A course covering the higher fungi pathogenic for man. A detailed study is made of each and correlated with the symptomatology, immunology, and laboratory diagnosis of the human mycotic diseases.

Two lecture and four laboratory hours a week, fall semester. Laboratory fee, $5.00. Mr. Huppert.

112. BACTERIAL PHYSIOLOGY (6). Prerequisites, Bacteriology 51, Chemistry 61, 62 or 64; a course in biochemistry is desirable.

This course is concerned with a study of the growth, metabolism, nutrition, enzyme reactions, and effects of physical and chemical agents on bacteria.

Three lecture and six laboratory hours a week, fall semester. Laboratory fee, $6.00. Mr. Straughn.

115. ADVANCED BACTERIOLOGY OR IMMUNOLOGY (3 or more). Prerequisites, Bacteriology 101ab or 132 and permission of department.

A course designed to introduce the student to research methods. Minor investigative problems are conducted by the student with advice and guidance of the staff.

Hours, credit and laboratory fee to be arranged, any term. May be continued for credit two or more semesters. Staff.

120. VIROLOGY (4). Prerequisites, Bacteriology 101ab or 132.

A course covering the nature of viruses and rickettsiae, with laboratory exercises emphasizing procedures for propagation and examination of these agents, including infectivity tests, serological procedures, and identification.

Two lecture and four laboratory hours a week, spring semester. Laboratory fee, $12.00. Mr. Manire.

132. PATHOGENIC BACTERIOLOGY (7). Required for dental students and medical technologists. Prerequisites, Chemistry 11-12 or 11-21; and two courses selected from botany, physics, or zoology.

A course covering general bacteriological and serological techniques; common pathogenic microorganisms, with particular reference to the oral cavity; and the principles of sterilization, disinfection, chemotherapeusis, and immunity.

Five lecture and six laboratory hours a week, fall quarter; remainder of semester three lecture and six laboratory hours. Laboratory fee for non-dental students, $10.00. Messrs. MacPherson, Manire, Cromartie, Straughn, Huppert, Schwab.

151. GENERAL BACTERIOLOGY (4). Prerequisites, Chemistry 11-12 or 11-21, and Botany 41 or Zoology 41. Open only to majors in departments other than bacteriology.

A general science course introducing the student to the entire scope of bacteriology. Representative microorganisms are studied and fundamental principles are stressed. An individual laboratory project or literary review is required.

Two lecture and four laboratory hours a week, spring semester. Laboratory fee, $4.00. Mr. Schwab.

Courses for Graduates

301. RESEARCH (5 or more each term). Prerequisite, permission of the department.

Oportunity is offered properly prepared students to undertake research in bacteriology, immunology, virology, or medical mycology.

Hours and credits to be arranged, throughout the year. Laboratory fee, to be determined. May be continued for credit two or more semesters. Staff.

DEPARTMENT OF BIOCHEMISTRY AND NUTRITION

Professor: J. C. ANDREWS
Associate Professors: C. E. ANDERSON, J. L. IRVIN
Assistant Professors: J. E. WILSON, M. K. BERKUT
Part-time Instructor: C. L. YARBRO
Graduate Assistants: BRADFORD MILLER, H. M. EDERMA

Courses for Graduates and Advanced Undergraduates

101. GENERAL BIOCHEMISTRY (4 2/3). Prerequisites, Chemistry 43, 61 and 64 or equivalent.

A class and laboratory course for students of dentistry and for graduate students majoring in departments allied to Biochemistry. For such graduate students it may be counted as part of a minor in Biochemistry. In order to coincide with the quarter system of the School of Dentistry, this course is scheduled only up to the Christmas holidays.

Three lecture and eight laboratory hours a week, fall semester up to the Christmas holidays. Laboratory fee for non-dental students, $10.00. Messrs. Andrews, Irvin, Anderson, Wilson, Berkut, and Yarbro.

103. BIOCHEMISTRY (7). (Previously listed as Biological Chemistry 102). Prerequisites, Chemistry 43, 61 and 64 or equivalent.

A class and laboratory course for students of medicine and for graduate students intending to major in Biochemistry or desiring a full year's course. Designed as preparation for Biochemistry 104, it covers the fundamental chemistry of carbohydrates, fats, proteins, vitamins, and minerals.

Three lecture and eight laboratory hours a week, fall. Laboratory fee for non-medical students, $15.00. Messrs. Andrews, Anderson, Irvin, Wilson, Berkut.

(NOTE: Prospective graduate students should consult the department as to the change in schedule from January 1 to the end of the semester.)

104. BIOCHEMISTRY (7). (Previously listed as Biological Chemistry 103). Prerequisite, Biochemistry 103 or equivalent.

A continuation of 103, applying the principles covered in that course to metabolism, acid-base balance, etc. The laboratory work includes gastric juice, blood, and urine analysis. After completion of the medical students' part of the course (about March 10) graduate students will be introduced to a study of biochemical preparations and methods for their analysis as well as to some elementary physico-chemical principles which find application in biochemistry.

Three lecture and eight laboratory hours a week, spring. Laboratory fee for non-medical students, $15.00. Messrs. Andrews, Anderson, Irvin, Wilson, Berkut.

108. ELEMENTARY BIOCHEMISTRY AND NUTRITION (P.H. 148) (3). Prerequisites, Chemistry 61 and 64 or equivalent.

An introduction to nutrition emphasizing its biochemical aspects and its experimental basis. Offered jointly by the Departments of Biochemistry and Nutrition and of Public Health Nutrition. For students of the biological sciences.

Three lectures a week, spring. Messrs. Andrews, Bryan, and staffs.

Courses for Graduates

201. ENZYMES (5). Prerequisites, Biochemistry 103 and 104 or equivalent.

A course in the classification and properties of enzymes and in the mode of action and kinetics of enzyme-catalyzed reactions.

Three lecture and four laboratory hours a week, fall. Laboratory fee, $10.00. Messrs. Irvin, Anderson, Wilson.

202. VITAMINS AND HORMONES (5). Prerequisites, Biochemistry 103 and 104 or equivalent.

The chemistry and the functions of the vitamins and the hormones in biological systems.

Five lectures a week, spring. Messrs. Anderson, Irvin, Wilson.

203. INTERMEDIARY METABOLISM (5). Prerequisites, Biochemistry 103 and 104 or equivalent.

The intermediary metabolism of carbohydrates, fats, and proteins.

Five lectures a week, fall. Messrs. Irvin, Anderson, Wilson.

(NOTE: Courses 201, 202 and 203 are offered in alternate years.)

204. BIOCHEMICAL PREPARATIONS (5). Prerequisites, Biochemistry 103 and 104 or equivalent.

A laboratory course in biochemical preparations and analytical methods for testing their purity.

Ten laboratory hours a week, either semester. Laboratory fee, $15.00 Messrs. Andrews, Anderson, Irvin, Wilson.

211, 212. SEMINAR (1 each). Prerequisites, Biochemistry 103 and 104 or equivalent and reading knowledge of German.

This course consists of reports on published research, chiefly current literature.

One hour a week throughout both semesters. Messrs. Andrews, Anderson, Irvin, Wilson.

301, 302. RESEARCH IN BIOCHEMISTRY (6 or more each).

Equivalent of six or more hours a week throughout both semesters. Laboratory fee, $15.00 each semester. Messrs. Andrews, Irvin, Anderson, Wilson.

DEPARTMENT OF BOTANY

Professors: J. N. COUCH, H. R. TOTTEN, J. E. ADAMS, V. A. GREULACH
Associate Professor: A. E. RADFORD
Visiting Associate Professor: *MARY ESTHER GAULDEN
Curator of the Herbarium: A. E. RADFORD
Research Associate: E. KATHLEEN GOLDIE-SMITH
Instructors: M. B. HUNEYCUTT, W. J. KOCH
Coker Fellow: J. A. BOOLE, JR.
Teaching Fellow: R. L. WYATT
Graduate Assistants: L. S. BEARD, J. M. HERR, JR., D. F. HOUCK, PEGGY-ANN KESSLER, C. E. MILLER, MARY SUE MUNSON, J. E. O'CONNELL, FRANCES E. SILLIMAN, JOANNA WOODSON

For the A.B. with major in botany the following courses are required: Botany 41 (or 1 with grade of "B" or better), 42, and four additional courses in botany, one of which may be Bacteriology 151. Also required are Zoology 41, 42; one year of chemistry, (preferably more); and either Physics 24-25 or Geology 41-42, (preferably both). Six courses in departments outside of the Division of Natural Sciences are required.

Those students who plan to teach in public high schools should read the instructions under the School of Education section of the catalogue, page 144.

Courses for Undergraduates

1. PLANT BIOLOGY (4). Freshman or sophomore elective. This may be taken to satisfy partially the requirement for natural science in the General College but should not be taken by anyone intending to major in a natural science. However, with the permission of the department, Plant Biology with a grade of "A" or "B" may be substituted for Botany 41 as a prerequisite, or as one of the six courses required for an undergraduate major.

A study of plants as living organisms, with emphasis on their life processes, heredity, relationship to environment, and biological and economic importance. Fundamental biological principles and scientific methods are illustrated and stressed.

Three lecture and two laboratory hours a week, fall and spring. Laboratory fee, $2.00. Miss Gaulden, Messrs. Adams, Greulach, Koch; assistants.

* Fall semester, 1954.

41. GENERAL BOTANY I: PRINCIPLES OF BOTANY (4). To be taken instead of Botany 1 by students intending to major in the natural sciences. Credit will not be given for both of these courses.

An introduction to the structure, physiology, genetics, and classification of plants.

Three lecture and three laboratory or field hours a week either semester, with a special section in the spring for pharmacy students. Laboratory fee, $4.00. Messrs. Couch, Totten, Greulach, Radford, Huneycutt; assistants.

42. GENERAL BOTANY II: THE PLANT KINGDOM (4). Prerequisite, Botany 41 or 1, (see above).

A survey of the plant kingdom with emphasis on the structure, reproduction, and classification of selected types. Laboratory and field studies of local non-vascular and vascular plants.

Three lecture and three laboratory or field hours a week, spring. Laboratory fee, $4.00. Mr. Radford.

43. LOCAL FLORA (4). Prerequisite, Botany 41.

A study of the structure and classification of seed plants, with primary emphasis on field and laboratory studies of the local flora.

Two lecture and six laboratory hours a week, spring. Laboratory fee, $4.00. Mr. Radford.

45. PHARMACOGNOSY (5). Prerequisite, Botany 41. Required of second-year students in the School of Pharmacy and open to others only by special permission of the Department of Botany.

The history, production, and evaluation of crude drugs of vegetable and animal origin; microscopical study and identification of powdered drugs, their common adulterants; and some food products.

Two lecture and six laboratory hours a week, fall. Laboratory fee, $6.00. Mr. Totten; assistants.

Courses for Graduates and Advanced Undergraduates

101. A COMPARATIVE SURVEY OF THE NON-VASCULAR PLANTS (4). Prerequisite, Botany 41 (or 1), and 42.

An introduction to the structure, physiology, and life histories of bacteria (including the actinomycetes), fungi, algae, lichens, mosses, and liverworts.

Two lecture and four laboratory hours a week, spring. Laboratory fee, $4.00. Mr. Couch.

102. COMPARATIVE MORPHOLOGY OF VASCULAR PLANTS (4). Prerequisites, Botany 41 (or 1), 42 (or 101).

Detailed study of selected vascular plants to portray the evolutionary development of the group.

Two lecture and four laboratory hours a week, fall. Laboratory fee, $4.00. Mr. Adams.

103. TAXONOMY OF FLOWERING PLANTS (4). Prerequisites, Botany 41, 42 or equivalent.

The collection, identification and preparation of herbarium specimens and structural studies of the principal families of flowering plants.

Two lecture and four laboratory hours a week, spring; and summer session (1955 and alternate years). Laboratory fee, $4.00. Mr. Totten.

104. INTRODUCTORY PLANT PHYSIOLOGY (4). Prerequisites, Botany 41 (or 1) and 42, General Chemistry.

A general introductory study of the life processes of plants, including water relations, mineral metabolism, photosynthesis, foods, digestion, respiration, assimilation, and growth.

Three lecture and three laboratory hours a week, fall; and summer session (1955 and alternate years). Laboratory fee, $6.00. Mr. Greulach.

105. PLANT ANATOMY (4). Prerequisites, Botany 41, 42 (or 101), 102.

Introduction to the developmental and comparative anatomy of vascular plants. Practice in methods of anatomical microtechnique.

Two lecture and four laboratory hours a week, spring (1954-1955 and alternate years). Laboratory fee, $6.00. Mr. Adams.

106. CYTOLOGY (4). Prerequisites, Botany 41, 42; chemistry and genetics recommended.

The study of the structure and function of plant and animal cells.

Two lecture and four laboratory hours a week, fall. Laboratory fee, $4.00. Miss Gaulden.

107. PLANT ECOLOGY (4). Prerequisite, Botany 103.

Study of ecological principles and problems primarily in relation to vegetation and habitats of North Carolina.

Two lecture and six laboratory hours a week, fall (1955 and alternate years). Laboratory fee, $8.00. Mr. Radford.

114. ALGAE (4). Prerequisite, Botany 42.

A survey of the algae, including both fresh-water and marine groups.

Two lecture and four laboratory hours a week, spring (1954-1955 and alternate years). Laboratory fee, $4.00. Mr. Couch.

115. SURVEY OF THE FUNGI (4). Prerequisite, Botany 42.

A survey of the fungal groups, including the true fungi, myxomycetes, and lichens.

Two lecture and four laboratory hours a week, fall (1955-1956 and alternate years). Laboratory fee, $4.00. Mr. Couch.

154. DENDROLOGY (4). Prerequisite, Botany 42 or equivalent.

A taxonomic study of the native and introduced woody plants, based largely on bud, bark, wood, and flower characteristics.

One lecture and six laboratory or field hours a week, spring (1955 and alternate years). Laboratory fee, $4.00. Mr. Totten.

155. DENDROLOGY (4). Prerequisite, Botany 42 or equivalent.

A taxonomic study of the native and introduced woody plants, based largely on leaf, bark, and fruit characteristics.

Three lecture periods and fifteen laboratory or field hours a week, first term of the summer session (1954 and alternate years). Laboratory fee, $4.00. Mr. Totten.

Courses for Graduates

211, 212. ADVANCED MYCOLOGY: PHYCOMYCETES, ASCOMYCETES, BASIDIOMYCETES, AND FUNGI IMPERFECTI (5 each). Prerequisite, Botany 42 or 101.

These courses are intended for students who wish to specialize in mycology, plant pathology, or microbiology. Class work consists of lectures and student reports on the literature; laboratory work consists of the collection and identification of fungi, study of their structure and development, technics for isolation and

pure culture of fungi. Botany 211, Myxomycetes, Phycomycetes, and Ascomycetes; Botany 212, Basidiomycetes and Fungi Imperfecti.

Two lecture and six laboratory hours a week, 211, *fall;* 212, *spring. Laboratory fee, $4.00 each semester.* Mr. Couch.

221. ADVANCED PLANT PHYSIOLOGY I. (5). Prerequisite, Botany 104 or equivalent; general physics advisable.

An advanced study of plant colloids; osmosis, permeability, water absorption and translocation; soil water relations; transpiration; and the absorption, translocation, and utilization of mineral salts.

Three lecture and four laboratory hours a week, fall. Laboratory fee, $6.00. Mr. Greulach.

222. ADVANCED PLANT PHYSIOLOGY II. (5) Prerequisites, Botany 104, or equivalent, and organic chemistry.

An advanced study of plant metabolism and growth, including enzymes; photosynthesis; respiration; carbohydrate, fat, and nitrogen metabolism; plant hormones; growth dynamics and correlations; and the effects of environmental factors on growth. (Botany 221 and 222 replace the three quarter sequence Botany 121, 122, 123.)

Three lecture and four laboratory hours a week, spring. Laboratory fee, $6.00. Mr. Greulach.

224. PHYSIOLOGY OF THE FUNGI (2). Prerequisites, Botany 104 and Botany 115, 211 or 212.

A study of the life process of fungi with particular emphasis on those aspects which differ most from the physiology of green plants. Nutrition, respiration and fermentation, synthetic processes, and the effects of environmental factors on growth and sporulation are stressed.

Two lecture and report hours a week, spring (1954-1955 and alternate years). Mr. Greulach.

245. ADVANCED MACROPHARMACOGNOSY (4). Prerequisites, Botany 45 and permission of the instructor.

Studies in the culture of crude drugs in the drug garden, and in the harvesting and preparation of cultivated and wild crude drugs. Of special interest to graduate students in the School of Pharmacy, though open to others also.

One lecture or report and six laboratory hours a week, fall. Laboratory fee, $10.00. Mr. Totten.

246. ADVANCED MICROPHARMACOGNOSY (4). Prerequisites, Botany 45 and permission of the instructor.

Advanced study of plant drugs; general methods in microanalysis of powdered drugs; preparation of materials for study; microanalysis of typical drugs and their adulterants and mixtures. Of special interest to graduate students in the School of Pharmacy, although open to others with permission of instructor.

One lecture or report and six laboratory hours a week, spring. Laboratory fee, $10.00. Mr. Adams.

251. PHYLOGENY AND CLASSIFICATION OF FLOWERING PLANTS (3). Prerequisite, Botany 103.

Comparative study of modern systems of classification based upon morphological and phylogenetic considerations.

One lecture or report and four laboratory hours a week, spring (1955-1956 and alternate years). Laboratory fee, $4.00. Mr. Adams.

252. ADVANCED MORPHOLOGY AND TAXONOMY (2). Prerequisites, Botany 102, 103, and permission of the instructor.

Reports, lectures, and discussion on special topics centering around the morphology and taxonomy of vascular plants.

Two lecture or report hours a week, spring (1954-1955 and alternate years).

256. PLANT GEOGRAPHY (2). Prerequisite, Botany 103.

Discussion of the principles and problems of the geographic distribution of plants.

Two lecture or report hours a week, fall (1954-1955 and alternate years). Mr. Adams.

261. BIOSYSTEMATICS (2). Prerequisites, Botany 103 and cytology or genetics.

A consideration of recent developments in plant taxonomy, especially the use of genetics, cytology and ecology in the understanding of natural units of classification.

Two lecture or report hours a week, spring (1955-1956 and alternate years).

262. CYTOGENETICS (4). Prerequisites, Botany 41, cytology and genetics.

The application of cytological and genetic techniques to problems in plant breeding and growth.

Two lecture and four laboratory hours a week, fall (1955-1956 and alternate years). Laboratory fee, $4.00. Mr. Wood.

The following courses are designed for applicants for advanced degrees. The work of each of these courses may be continued for two or more semesters under the same course number.

Each course requires six or more laboratory and conference hours a week, fall and spring. Three or more credits are given. Laboratory fee $4.00 each semester.

310. RESEARCH IN FUNGI.
Mr. Couch.

320. RESEARCH IN PLANT PHYSIOLOGY.
Mr. Greulach.

330. RESEARCH IN THE TAXONOMY OF VASCULAR PLANTS.
Messrs. Totten, Adams, or Radford.

350. RESEARCH IN THE MORPHOLOGY OF VASCULAR PLANTS.
Mr. Adams.

360. RESEARCH IN CYTOLOGY AND CYTOGENETICS.

SCHOOL OF BUSINESS ADMINISTRATION AND DEPARTMENT OF ECONOMICS

Professors: R. J. M. HOBBS, D. D. CARROLL, E. E. PEACOCK, *J. B. WOOSLEY, C. P. SPRUILL, G. T. SCHWENNING, *CLARENCE HEER, H. D. WOLF, †D. H. BUCHANAN, M. S. HEATH, D. J. COWDEN, R. S. WINSLOW, R. P. CALHOON, ‡P. N. GUTHRIE, C. H. MCGREGOR, J. E. DYKSTRA, C. S. LOGSDON, O. T. MOUZON, W. J. GRAHAM, L. D. ASHBY, C. A. KIRKPATRICK, J. C. D. BLAINE

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* Kenan Professor Emeritus.
† Professor Emeritus.
‡ Absent on leave, fall semester, 1954-1955.

Associate Professors: C. C. CARTER, A. G. SADLER, G. A. BARRETT, *J. T. O'NEIL, C. E. PHILBROOK, A. M. WHITEHILL, JR., R. W. PFOUTS, C. S. GEORGE, A. W. PIERPONT, W. A. TERRILL
Assistant Professors: T. M. STANBACK, JR., R. L. BUNTING, J. C. INGRAM, H. Q. LANGENDERFER, J. M. PARRISH, G. S. FYFE
Lecturers: †FRANZ GUTMANN, ‡G. M. WOODWARD, R. G. SARLE, RASHI FEIN, C. F. POSTON, F. J. SCHWENTKER, I. N. REYNOLDS, J. P. MAGGARD
Part-time Lecturer: W. F. SUHRING
Instructor: L. R. JORDAN
Part-time Instructors: J. H. BRASHEAR, M. HANNA, P. HUNTLEY, W. L. IVEY, R. I. LEVIN, A. M. MOORE, P. K. SINCLAIR, W. A. SPIVEY
Teaching Fellows: §C. E. FERGUSON, ‖R. D. HALL, B. G. JONES
Ernest H. Abernethy Fellow in Southern Industry: SOPHIE E. B. HAMILTON

SCHOOL OF BUSINESS ADMINISTRATION

The several curricula which lead to the degree of Bachelor of Science in Business Administration are described in detail in a separate bulletin of the School of Business Administration, which may be obtained by addressing a request to the Dean.

BUSINESS ADMINISTRATION

NOTE: Economics 31-32, or equivalent, is prerequisite to all other courses in Economics and all courses in Business Administration, except as otherwise indicated. Economics 61 with a grade of C or better may, under certain circumstances, be substituted for Economics 31-32.

Courses for Undergraduates

51. BUSINESS ORGANIZATION (3). Prerequisite, Economics 31 or equivalent.
The forms of business organization with emphasis on the corporation. Special attention is given to the functions of production, finance, personnel, marketing, risk-taking, and records and standards.

66. GENERAL PSYCHOLOGY FOR STUDENTS OF BUSINESS ADMINISTRATION (3). Available for students in the School of Business Administration; not open to others.
The basic principles of psychology which will enable the student to read and evaluate intelligently in any of the special fields. Much of the illustrative material relates to business problems.

71. ACCOUNTING PRINCIPLES I (3). Prerequisite (or corequisite), Economics 31-32 or equivalent.
Fundamental accounting principles applied to operations of single proprietorships, partnerships, and corporations.
Recitation, two hours; laboratory, two hours; fall and spring. Laboratory fee, $3.00. Messrs. Peacock, Graham, Terrill, Langenderfer, Sarle, Reynolds, Huntley.

* Absent on assigned leave, Scott Paper Company, 1954-1955.
† Lecturer Emeritus.
‡ On assigned leave, Economic Fisheries Research, 1954-1955.
§ Spring semester, 1954-1955.
‖ Fall semester, 1954-1955.

72. ACCOUNTING PRINCIPLES II (3). Prerequisite, Business Administration 71 or equivalent.

Special accounting problems of trading and manufacturing corporations; valuation of assets and liabilities; analysis of financial statements.

Recitation, two hours; laboratory, two hours; fall and spring. Laboratory fee, $3.00. Messrs. Peacock, Graham, Sadler, Terrill, Langenderfer, Sarle, Reynolds.

91. BUSINESS LAW (3).

The purpose of this course is to give the student an understanding of the main principles of law which govern the daily conduct of business. Contracts and agency are given special attention.

Fall and spring. Messrs. Hobbs, Carter, Barrett.

Courses for Graduates and Advanced Undergraduates

110. REAL ESTATE (3).

An introduction to: the economic utilization of land; the relation of real estate to business; the real estate market; factors influencing values; legal relationships; financing; the impact of government.

Fall and spring. Mr. Pierpont.

120. GENERAL INSURANCE (3).

Fundamental principles of insurance; their application to life, property, casualty, and social insurance.

Fall and spring. Messrs. Parrish, Schwentker.

121. LIFE INSURANCE (3).

Basic life insurance principles and practices; includes functions, policy types, premium and reserve calculation; settlement options; risk selection; individual and group coverages; company organization and management.

Fall. Messrs. Langenderfer, Schwentker.

122. PROPERTY INSURANCE (3).

A study of the more important types of property coverages, including fire, marine, and inland marine insurance. Includes hazards, policy types, rate determination, company organization, state regulations, and legal background.

Fall and spring. Mr. Schwentker.

123. CASUALTY INSURANCE (3).

The social, economic, and legal bases for workmen's compensation, automobile, accident and health, burglary, fidelity, surety, and other casualty insurances. Includes rate-making, contract analysis, types of companies, and state regulation.

Fall. Mr. Schwentker.

124. ADVANCED LIFE INSURANCE (3). Prerequisite, Business Administration 121 or equivalent.

An introduction to the more specialized life insurance services, such as administration of policy proceeds, the integration of life and property estates, and business life insurance.

Spring. Mr. Schwentker.

125. ADVANCED PROPERTY AND CASUALTY INSURANCE (3). Prerequisites, Business Administration 122 and 123 or equivalents.

Integration of property and casualty insurance; includes situation analysis, agent-client-company relationships, the philosophy and development of insurance trade associations and governmental regulation.

Spring. Mr. Schwentker.

130. PRINCIPLES OF INDUSTRIAL MANAGEMENT (3).
A survey of the basic principles and control practices of modern scientific management, as applied in industry.
Fall and spring. Messrs. Dykstra, Whitehill, George, R. Levin.

131. PRODUCTION MANAGEMENT: THEORIES AND PRACTICES (3). Prerequisite, Business Administration 130 or equivalent.
A case analysis course. Actual cases from industry are analyzed in the light of scientific management principles, and sound solutions are sought. Practice in writing problem-solution reports is an important part of the course.
Fall. Messrs. Dykstra, George.

133. TIME AND MOTION STUDY (3). Prerequisite, Business Administration 130 or equivalent. Open to seniors and graduate students only.
The principles and techniques of modern motion and time study.
Laboratory, six hours; fall and spring. Laboratory fee, $6.00. Messrs. Dykstra, George.

134. PREDETERMINED TIME STUDY (3). Prerequisites, Business Administration 130 or equivalent and senior standing.
Predetermined time study principles and practice; recognition and definition of fundamental work elements and their keying to standard data; training in the application of predetermined time study techniques.
Recitation, two hours; laboratory, two hours; spring. Laboratory fee, $3.00. Mr. Dykstra.

135. QUALITY CONTROL BY STATISTICAL METHODS (Economics 173) (3). Prerequisite, Economics 170 or equivalent.
Control charts. Historical analysis. Process control: variables; defects; defectives. Operating characteristic. Tolerance limits. Lot acceptance: single; double; multiple; sequential. Producer's and consumer's risk. AOQL. Cost functions.
Recitation, three hours; laboratory problems; spring. Laboratory fee, $3.00. Mr. Cowden.

136. PRODUCTION PLANNING AND CONTROL (3). Prerequisite, Business Administration 130 or equivalent.
Control principles and their application to insure economical job order and quantity production: economical lot sizes, master planning, routing, scheduling, machine loading, dispatching, and follow-up.
Fall. Mr. George.

138. PRODUCTION MANAGEMENT PROBLEMS (3). Prerequisite, Business Administration 130 or equivalent.
This course deals with the solution of common industrial problems, such as determining economical manufacturing lot sizes and machinery replacement problems. The approach combines management principles with mathematical methods.
Spring. Mr. Dykstra.

139. INDUSTRIAL PURCHASING (3). Prerequisite, Business Administration 160 (Economics 124) or Business Administration 130 or equivalent.
The purchasing function: its organization and major problems; includes organization, procedures and policies, price forecasting, legal aspects; traffic and claims, stores control, budgeting, and measurements of performance.
Fall and spring. Messrs. Dykstra, Logsdon,

141. TRAFFIC MANAGEMENT (3).
This course deals with the nature and functions of the industrial traffic department and the rights and duties of shippers as well as the carriers' traffic operations and their duties and rights as carriers.
Spring. Mr. Blaine.

142. TRAFFIC PROBLEMS (3). Prerequisite, Business Administration 141 or equivalent.

A course designed to teach the students to analyze traffic situations which they are likely to encounter under actual conditions through the use of selected cases and problems in industrial traffic management and carrier traffic operations.

Spring. Mr. Blaine.

150. PERSONNEL RELATIONS (3).

Interpersonal aspects of business with emphasis on the human phase of organization, personnel efficiency, handling personnel situations, developing work teams, labor relations, and administration of other matters affecting the personnel of an organization.

Fall and spring. Messrs. Schwenning, Calhoon, Noland, Whitehill, Jordan.

153. LABORATORY ANALYSIS IN PERSONNEL WORK (Psychology 181) (3). Advised prerequisite, Psychology 135 or Business Administration 150 or equivalent.

A laboratory course in personnel techniques as applied practically to job analysis, constructing application blanks, rating scales, etc.

One lecture and four laboratory hours, spring. Laboratory fee, $3.00. Miss Adkins, Messrs. Jeffrey, B. Levin.

156. PERSONNEL PROBLEMS (3). Prerequisite, Business Administration 150 or equivalent.

Development of personnel projects and problem solutions on a professional scale. Analysis of personnel problems by use of case studies and demonstrations.

Recitation, two hours; laboratory, two hours; fall and spring. Laboratory fee, $3.00. Mr. Calhoon.

159. PERSONNEL SELECTION AND COUNSELING (3). Prerequisite, Business Administration 150 or equivalent.

Study of factors in effective selection and techniques for counseling employees. Major emphasis is on job analysis, directive and non-directive interviewing, and other selection techniques.

Recitation, one hour; laboratory, four hours; fall and spring. Laboratory fee, $3.00. Mr. Calhoon.

160. PRINCIPLES OF MARKETING (Economics 124) (3).

Marketing organization and methods with emphasis on the social and economic aspects of distribution. Consumer problems, marketing functions and institutions, marketing methods and policies.

Fall and spring. Messrs. Kirkpatrick, Parrish, Fyfe, Maggard, Suhring.

161. ADVERTISING (3). Prerequisite, Business Administration 160 (Economics 124) or equivalent.

The organization and functions of advertising from the point of view of the business executive. Topics include economic and social aspects; types of advertising and purposes; media types, selection and evaluation; advertising research.

Fall and spring. Messrs. Kirkpatrick, Maggard.

162. SALESMANSHIP AND SALES PROMOTION (3). Prerequisite, Business Administration 160 (Economics 124) or equivalent.

Principles of effective selling; professional aspects of personal selling; qualifications and obligations of salesmen; program planning and administration; interdepartmental coordination of promotion efforts.

Fall and spring. Mr. Kirkpatrick.

163. ADVERTISING PROBLEMS (3). Prerequisite, Business Administration 161 or graduate standing.

An analysis of advertising problems confronting management. Case studies emphasize the fitting of advertising into the marketing program, its control and coordination, and the evaluation of advertising results.

Spring. Mr. Kirkpatrick.

164. WHOLESALING (3). Prerequisite, Business Administration 160 (Economics 124) or equivalent.

A study of the development of the wholesale structure and of such wholesale management problems as location, buying, stock control, advertising, selling, order handling, traffic management, credit, and expense.

Fall and spring. Mr. Logsdon.

165. RETAIL PRINCIPLES AND PROBLEMS (3). Prerequisite, Business Administration 160 (Economics 124) or equivalent.

A study of the present retail structure and its development. Analysis is made of retail management problems arising in determining store location, layout, buying and selling, personnel, and control.

Fall and spring. Messrs. McGregor, Fyfe.

166. RETAIL MANAGEMENT PROBLEMS (3). Prerequisite, Business Administration 165 or graduate standing.

A problems course dealing with the more important problems which confront retail management in large and small stores. Emphasis is placed upon the planning and control aspects of retail management.

Spring. Mr. McGregor.

167. SALES MANAGEMENT (3). Prerequisite, Business Administration 160 (Economics 124) or equivalent.

The planning, organization, and control of sales operations. Emphasis is placed upon the sales manager's functions and problems in manufacturing, wholesaling, and service establishments.

Fall and spring. Messrs. Logsdon, Fyfe.

168. SALES AND MARKET ANALYSIS (3). Prerequisites, Economics 170 and Business Administration 160 (Economics 124) or equivalents.

A study of procedures and problems in the analysis and evaluation of market areas, distribution channels, and marketing methods. Emphasis is placed on commercial research in the determination of sound marketing policies.

Fall and spring. Mr. McGregor.

169. MARKETING POLICIES (3). Prerequisites, Business Administration 160 (Economics 124) or equivalent and senior standing.

A problem method course dealing with specialized marketing functions and policies; includes product and line, brands, channels of distribution, prices and pricing, sales promotion, and operating diagnosis and control.

Fall and spring. Messrs. Logsdon, Fyfe.

171. INTERMEDIATE ACCOUNTING (3). Prerequisite, Business Administration 72 or equivalent.

A study of accounting problems involved in actuarial science, consignments, installment sales, branches, mergers, partnership installment liquidation, and insurance.

Fall and spring. Messrs. Peacock, Sadler, Terrill, Langenderfer, Reynolds.

172. ADVANCED ACCOUNTING (3). Prerequisite, Business Administration 171 or equivalent.

A study of accounting for combinations, consolidations, trustees, estates and corporate receiverships, liquidations, and reorganizations.

Fall and spring. Messrs. Peacock, Sadler, Terrill, Langenderfer.

173. COST ACCOUNTING (3). Prerequisite, Business Administration 72 or equivalent.

A thorough study of cost systems, including job order, process, and standard costs. Control of costs is stressed. Laboratory work covers job order and process cost sets.

Recitation, two hours; laboratory, two hours; fall and spring. Laboratory fee, $3.00. Messrs. Peacock, Terrill.

174. ACCOUNTING THEORY (3). Prerequisite, senior standing.

Critical examination and analysis of accounting principles with emphasis on determination of cost and income, valuation and statement presentation. Study of current problems presented in accounting literature and business cases.

Fall. Mr. Graham.

175. AUDITING (3). Prerequisite, Business Administration 72 or equivalent.

A course in auditing theory and practice. The auditing procedures established by the American Institute of Accountants are covered and the duties of both junior and senior accountants are studied.

Recitation, two hours; laboratory, two hours; fall and spring. Laboratory fee, $3.00. Mr. Peacock.

177A. FEDERAL AND STATE INCOME TAXATION (3). Prerequisite, senior standing.

Federal and state income tax laws and their application to tax situations for individuals and corporations. Lectures supplemented by laboratory problems and exercises.

Fall. Messrs. Sadler, Terrill, Langenderfer.

177B. FEDERAL AND STATE TAXATION (2). Prerequisite, Business Administration 177A or equivalent.

Federal and state income tax laws, their applications to tax situations for partnerships, corporate reorganizations, personal holding companies, estates, trusts; estate, gift, and inheritance taxes. Lectures, laboratory problems, and exercises.

Spring. Messrs. Sadler, Terrill, Langenderfer.

178. CERTIFIED PUBLIC ACCOUNTING PROBLEMS (3). Prerequisite, major in accounting.

A review of the general and specialized accounting problems which constitute the subject matter of C.P.A. examinations.

Spring. Mr. Langenderfer.

179. GOVERNMENTAL ACCOUNTING (3). Prerequisite, Business Administration 72 or equivalent.

Application and procedures for fund accounting in local governments, including counties, townships, cities, villages, school and special districts. Special consideration given to drafting of work sheet layouts.

Recitation, two hours; laboratory, two hours; fall and spring. Laboratory fee, $3.00. Messrs. Sadler, Terrill.

180. CORPORATION FINANCE (3). Prerequisite, Business Administration 71 or equivalent.

A study of the principles and practice of corporate financing. The methods of raising permanent capital, problems of current financing, the treatment of earnings, and financial problems incident to expansion and reorganization.

Fall and spring. Messrs. O'Neil, Pierpont, Parrish, Poston.

182. PROBLEMS IN BUSINESS FINANCE (3). Prerequisite, Business Administration 180.

Utilizing the case method of instruction, this course analyzes selected problems dealing with the financial administration of working capital, budgetary planning and control, financing long-run requirements, reserve and dividend policies, promotion, expansion and combination.

Fall and spring. Messrs. O'Neil, Pierpont.

184. COMMERCIAL BANKING: OPERATIONS AND POLICIES (3). Prerequisite, Economics 81 or equivalent.

A study of the organization and operation of banks; analyses of bank assets, liabilities, earnings, and expenses; the interrelations of business and banking policies.

Fall. Messrs. O'Neil, Pierpont.

185. INVESTMENTS (3). Prerequisite, Business Administration 180 or equivalent.

A survey of investment principles and practices. Primary emphasis is placed on security analysis with the objective of developing techniques and standards of investment appraisal.

Fall and spring. Messrs. O'Neil, Pierpont.

190. BUSINESS ECONOMICS (Economics 130) (3). Prerequisites, Economics 170 or equivalent and senior standing.

This course utilizes economic analysis as a basis for decision-making and policy formulation in the business firm.

Fall and spring. Messrs. Winslow, Stanback.

193. INDUSTRIES OF THE UNITED STATES (3). Prerequisite, junior standing.

An analysis of the structure, development, and competitive status of selected industries. Emphasis is placed on the technology of these industries and the principal problems of their management.

(1955-1956 and alternate years.) *Fall.* Mr. Mouzon.

194. CREDIT TRANSACTIONS AND SALES (3). Prerequisite, Business Administration 91 or equivalent.

The law of negotiable instruments and the legal principles governing sales, including conditional sales and security transactions, are covered.

Fall and spring. Messrs. Hobbs, Carter, Barrett.

195. LAW OF TRADE (3). Prerequisite, Business Administration 91 or equivalent.

This course considers the law affecting the conduct of trade and industry: nature and scope of competition at common law, and legislative attempts to fix the boundaries of permissible competition.

Fall and spring. Mr. Barrett.

196. HUMAN RELATIONS IN BUSINESS (3). Prerequisite, senior standing. Case studies and supplementary readings are used to develop skill in (1) recognition and analysis of problems in human interaction, and (2) formulation and communication of positive plans for responsible administrative action.

Fall and spring. Mr. Whitehill.

198. LEGAL ASPECTS OF BUSINESS ORGANIZATIONS (3). Prerequisites, Business Administration 91 and 194 or equivalents.

Analysis of common law rules, statutes and court decisions governing the organization and operation of partnerships and corporations, and an examination of statutes and decisions relating to bankruptcy.

Spring. Mr. Carter.

Courses for Graduates

207. SCIENTIFIC MANAGEMENT (3).

The functions and theories of management in contemporary business. The management movement, scientific method in management, laws of organization, and types and theories of management organization.

Fall. Mr. Schwenning.

231. PROBLEMS IN PRODUCTION MANAGEMENT POLICIES (3). Prerequisite, Business Administration 130 or equivalent.

An intensive coverage of the production management area of business administration by individual study, case analysis and reports. The development of sound manufacturing policies through critical analysis is the course objective.

Spring. Mr. Dykstra.

241. TRAFFIC ADMINISTRATION (3).

A study of the administrative policies of a traffic department as an integral part of the overall administrative policies of an organization.

(1955-1956 and alternate years.) *Spring.* Mr. Blaine.

255. WAGE AND SALARY ADMINISTRATION (3). Prerequisite, Business Administration 150 or equivalent.

The course emphasis is upon incentives, job evaluation, and other approaches to wages and salaries. Developmental and administrative aspects are stressed.

Recitation, two hours; laboratory, two hours; spring. Laboratory fee, $3.00. Mr. Calhoon.

259. PERSONNEL DEVELOPMENT (3). Prerequisite, Business Administration 150 or equivalent.

Analysis of training needs, methods, and programs; study of means for analyzing and reviewing development at all levels. Training in conference leading, case discussion leading, role play direction, coaching method, and job instruction.

Recitation, one hour; laboratory, four hours; fall. Laboratory fee, $3.00. Mr. Calhoon.

260. MARKETING MANAGEMENT (3). Prerequisite, Business Administration 160 (Economics 124) or equivalent.

A course in the planning and control of marketing operations. Includes forecasting and planning, modern control techniques and practices, and appraisal of distribution costs and their control.

Fall. Mr. McGregor.

268. MARKETING RESEARCH (3). Prerequisites, Business Administration 160 (Economics 124) and Economics 170 or equivalents.

A course covering research methodology with emphasis on the application of scientific techniques to marketing problems. Critical evaluation of information sources, research procedures, and utilization of research findings.

Spring. Mr. McGregor.

273. ADVANCED COST ACCOUNTING (3). Prerequisite, Business Administration 173 or equivalent.

Process cost accounting procedures, budgetary control and cost accounting, standard cost accounting, and managerial analyses and reports.

Fall. Mr. Terrill.

274. ACCOUNTING SYSTEMS (3). Prerequisites, Business Administration 172, 173 or equivalents.

The design and installation of accounting systems for textile and furniture manufacturing firms, banks, and public utilities.

Recitation, two hours; laboratory, two hours; spring. Laboratory fee, $3.00. Mr. Sadler.

276. ADVANCED ACCOUNTING THEORY (3).

Critical examination of accounting concepts and standards. Emphasis on income determination, particularly controversial issues. Study of current problems and contemporary development reflected in research bulletins, monographs, journals, textbooks, and reports.

Spring. Mr. Graham.

280. FINANCIAL POLICIES (3). Prerequisite, Business Administration 180 or equivalent.

The development of policies by business enterprises to solve financial problems. Cases selected from actual experience provide the basis for a critical evaluation of managerial decisions which create a defensible financial policy.

Fall. Mr. O'Neil.

290. MANAGEMENT ECONOMICS (3).

Concepts and methods of economic analysis are applied to problems of policy and operations facing the business executive. Emphasis is placed on conditions outside the business.

Fall and spring. Mr. Winslow.

296. HUMAN RELATIONS IN ADMINISTRATION (3).

The objective of this course is to develop attitudes and skills which will contribute to maximum effectiveness in the human aspects of administration. Case studies, supplemented by selected readings, stimulate systematic, rigorous analysis and decision-making ability.

Spring. Messrs. Calhoon, Whitehill.

297. BUSINESS RESEARCH AND REPORT WRITING (3).

Analytical skills and reasoning in business situations are developed through the preparation of a variety of reports; knowledge of sources of information and their effective use is stressed.

Fall and spring. Mr. Whitehill.

299. BUSINESS POLICY (3).

Integrating and building upon the business administration "core," this course approaches policy-making and administration in a firm from the point of view of top management.

Fall and spring. Mr. Barrett.

355. SEMINAR IN PERSONNEL (3). Prerequisite, Business Administration 150 or equivalent.

A course for individual research in special fields of personnel administration. **Fall and spring.*

NOTE: Registration for this course must be approved by the professor in charge.

* Equivalent of three hours a week.

360. SEMINAR IN MARKETING (3).

A course providing selected graduate students the opportunity to make an intensive study of specific marketing problems.

**Fall.* Messrs. McGregor, Logsdon, Kirkpatrick.

NOTE: Registration for this course must be approved by the professor in charge.

399. SEMINAR (3 each semester).

Individual research in a special field under the direction of a member of the department.

**Fall and spring.*

NOTE: Registration for this course must be approved by the professor in charge.

DEPARTMENT OF ECONOMICS

The Department of Economics offers courses leading to an A.B. degree with a major in economics through the College of Arts and Sciences and the A.M. and Ph.D. degrees in economics are offered through the Graduate School. Courses in economics are elected by and/or required of students in other departments and schools.

Undergraduate Major

Opportunities for Economics Majors: The courses leading to an A.B. degree with a major in economics comprise a large area of intelligent inquiry into the problems of economic life and the principles applicable thereto. The curriculum available provides the major in economics the opportunity to achieve one or more of the following objectives:

1. General education for intelligent citizenship with special emphasis upon the development of the understanding of the principles and problems of modern economic life.
2. Preparation for private employment. In pursuing this objective supplementary courses in business administration may be selected and integrated with the student's program.
3. Preparation for governmental employment.
4. Preparation for post-graduate work leading to the degrees of A.M. and Ph.D. in economics.
5. Specialized combination undergraduate programs such as pre-law and international studies, and either of the R.O.T.C. programs available at the University.

Requirements: For the degree of A.B. with a major in economics:

1. A minimum total of twenty (20) full semester divisional (Social Science) and non-divisional (Humanities and Natural Science) courses (60 semester hours) are required in addition to

* Equivalent of three hours a week.

those necessary for admission to the College of Arts and Sciences.

2. Eighteen (18) of the minimum total of twenty (20) courses (i.e. 54 semester hours) must be selected in accordance with the following distribution:

   (a) Six (6) full semester courses in economics (in addition to Economics 31 and 32) including Economics 81 and Economics 170 are required; and seven (7) full semester courses in economics are recommended.

      (1) Economics 31 and 32 should be taken while in the General College. A grade of C or better in Economics 31 and 32 is required as a condition for admission to a program leading to a major in economics.

      (2) Mathematics 7 and 8 or 10, or 11 and 12, or 15-16 should be taken in the General College. Students are advised to take Mathematics 10 if they are preparing for private employment in business.

   (b) From five (5) to seven (7) full semester allied courses (15 to 21 semester hours) within the Division of Social Sciences are required. With the permission of the chairman of the department, a maximum of three (3) business administration courses may be counted as allied courses, constituting a part of a well-developed and integrated plan. The combined maximum number of courses in economics and business administration shall not exceed nine (9) (i.e. 27 semester hours).

   (c) From five (5) to seven (7) full semester non-divisional courses within the Division of Humanities and Natural Sciences are required.

3. Two (2) of the minimum total of twenty (20) courses (6 semester hours) may be chosen as "free" electives from courses offered by departments of the College of Arts and Sciences other than economics. One (1) of these courses must be chosen in an allied divisional field and one (1) in a non-divisional field.

Graduate Degrees

The A.M. and Ph.D. degrees in economics are offered through the Graduate School. The objectives, requirements and other details for the A.M. and Ph.D. degrees are explained in the catalogue of the Graduate School.

ECONOMICS

NOTE: Economics 31-32, or equivalent, is prerequisite to all other courses in Economics and all courses in Business Administration, except as otherwise indicated. Economics 61 with a grade of C or better may, under certain circumstances, be substituted for Economics 31-32.

Courses for Undergraduates

30. INTRODUCTION TO ECONOMICS (3). Sophomore elective. Closed to prospective Economics and Business Administration majors.

Provides a general understanding of the economic system. Discusses economic problems on the market, national, and international levels with primary emphasis on national problems.

Fall and spring. Messrs. Heath, Stanback, Fein.

31-32. GENERAL ECONOMICS (3 each semester). Not open to freshmen. Sophomore elective.

The organization and underlying principles of modern economic life. The production, exchange, distribution, and consumption of wealth, and auxiliary economic problems.

Fall and spring. Messrs. Stanback, Carroll, Spruill, Wolf, Mouzon, Bunting, Fein, Parrish, Maggard, Brashear, Ivey, Moore, Sinclair, and other members of the staff.

61. PRINCIPLES OF ECONOMICS (3). For juniors and seniors not majoring in economics; not open to freshmen or sophomores.

The structure, functions, and underlying principles of modern economic life. May be used as general economics prerequisite for advanced courses if grade of C or better is earned.

Fall and spring. Messrs. Carroll, Mouzon.

74. GENERAL ACCOUNTING (3). Prerequisite, junior-senior standing. Non-business administration students only.

Basis for understanding, evaluating, and interpreting accounting information. Accounting process, determination of cost and income, sources and uses of capital, reporting, changing price levels.

Fall. Mr. Graham.

81. MONEY AND BANKING (3).

The functional operation of the American monetary system. The value of money, with particular reference to growing influences exerted by banks upon our credit structure.

Fall and spring. Messrs. Philbrook, Bunting, Ingram.

91. RESOURCES AND INDUSTRIES (3). Prerequisite, junior standing. Economics 31-32 is not prerequisite.

Availability of agricultural and industrial resources. Survey by industry analysis of selected social and economic problems related to the appraisal and utilization of world resources. An international studies course.

Spring. Mr. Mouzon.

Courses for Graduates and Advanced Undergraduates

111. INTERNATIONAL RESOURCES AND NATIONAL POLICY (3).

National policy and objectives and the nature of resources; production potentials; major agricultural and industrial resource problems and international resource interdependence; developed and underdeveloped areas; and international security.

Fall. Mr. Mouzon.

124. PRINCIPLES OF MARKETING (Business Administration 160) (3). Marketing organization and methods with emphasis on the social and economic aspects of distribution. Consumer problems, marketing functions and institutions, marketing methods and policies.

Fall and spring. Messrs. Kirkpatrick, Parrish, Fyfe, Maggard, Suhring.

130. BUSINESS ECONOMICS (Business Administration 190) (3). Prerequisites, Economics 170 or equivalent and senior standing.

This course utilizes economic analysis as a basis for decision-making and policy formulation in the business firm.

Fall and spring. Messrs. Winslow, Stanback.

131. ECONOMIC THEORY (3).

The analytical devices basic to the field of economics. The forces determining relative prices of products and of productive services. The role of competition in the planning of social-economic affairs.

Fall. Mr. Philbrook.

135. ECONOMIC HISTORY (3).

A study of American economic development, together with its European background.

Fall. Mr. Spruill.

137. ECONOMIC DEVELOPMENT IN JAPAN, CHINA, AND THE INDIAN PENINSULA SINCE 1800 (3).

A study of traditional economic life and modern economic developments in Japan, China, and India. Special attention is given to modern commerce, finance, industry, and labor and their effect on indigenous cultures.

Spring. Mr. Ingram.

141. PUBLIC FINANCE (Political Science 191) (3).

A general course covering the facts and theories of American public finance—federal, state, and local. Public expenditure, taxes and other forms of revenue, public borrowing, fiscal administration and policies.

Fall and spring. Messrs. Spruill, Ashby.

143. PROBLEMS IN STATE AND LOCAL FINANCE (Political Science 193) (3). Prerequisite, Economics 141 or equivalent.

Selected problems relating to the financing of state and local functions.

Spring. Mr. Ashby.

145. BUSINESS ORGANIZATION AND SOCIAL CONTROL (3).

Theories of private enterprise and public action; the growth of economic concentration; and the pattern of public control and its effects.

Fall. Mr. Heath.

151. THE AMERICAN TRANSPORTATION SYSTEM (3).

A course designed to give the student an understanding of the magnitude, structure, and functions of the transportation system of the United States.

Fall and spring. Mr. Blaine.

152. TRANSPORTATION REGULATION AND RATES (3).

The course deals with the significance of state and federal regulation and with the theory and practice of rate determination in transportation.

Fall and spring. Mr. Blaine.

153. PUBLIC UTILITIES (3).

The theory, techniques, and problems of government intervention in the establishment and operation of communications and power facilities, whether through regulation or public ownership.

Fall. Mr. Blaine.

161. THEORY OF INTERNATIONAL TRADE (3).

International economic relations. Problems involved in maintaining a world order and the role of free enterprise in their solution. The bases of trade, tariffs, exchange control, and trade policies.

Fall. Mr. Ingram.

162. INTERNATIONAL FINANCE (3). Prerequisite, Economics 81 or equivalent.

Monetary aspects of international trade and investment. The problems of maintaining world monetary order. Exchange rates, the balance of payments, international investment. Techniques of international finance.

Spring. Mr. Ingram.

170. ELEMENTARY STATISTICS (3). Prerequisites, Mathematics 7, 8 or 10, or equivalents.

Sources and collection of data, tabular and graphic presentation, averages, dispersion, time-series analysis, correlation, index numbers, reliability of statistics and tests of significance.

Recitation, three hours; fall and spring. Laboratory fee, $3.00. Messrs. Cowden, Pfouts, Fein.

171. FUNDAMENTALS OF STATISTICAL THEORY (3). Prerequisite, Economics 170 or equivalent.

Polynomial and exponential trends; moving seasonal. Index numbers. Estimation; power of a test; differences among variances and means; binomial distribution; chi-square. Multiple and partial correlation; correlation ratio; rank correlation.

Recitation, three hours; laboratory problems; laboratory fee, $3.00. Fall. Mr. Cowden.

172. INTERMEDIATE STATISTICS (3). Prerequisite, Economics 171 or equivalent.

Orthogonal polynomials; growth curves; harmonic analysis; weighted moving averages; serial correlation. Theory of index numbers. Analysis of variance and covariance. Nonlinear multiple correlation; multiple-partial correlation coefficient; compact methods.

Recitation, three hours; laboratory problems; laboratory fee, $3.00. Spring. Mr. Cowden.

173. QUALITY CONTROL BY STATISTICAL METHODS (Business Administration 135) (3). Prerequisite, Economics 170 or equivalent.

Control charts. Historical analysis. Process control: variables; defects; defectives. Operating characteristic. Tolerance limits. Lot acceptance: single; double; multiple; sequential. Producer's and consumer's risk. AOQL. Cost functions.

Recitation, three hours; laboratory problems; spring. Laboratory fee, $3.00. Mr. Cowden.

174. ECONOMETRICS (3). Prerequisites, Economics 171 and Mathematics 33 or equivalents.

The application of statistical methods to economic theory. Topics include measurement of demand and costs and macro-economic models.

(1955-1956 and alternate years.) *Spring.* Mr. Pfouts.

180. MATHEMATICS FOR ECONOMISTS (no credit).

Review of the calculus and its relevance to economic theory. Matrix algebra, difference equations and related topics together with applications in contemporary economic theory.

(1955-1956 and alternate years.) *Fall.* Mr. Ashby.

182. MATHEMATICAL ECONOMICS (Statistics 182) (3). Prerequisite, Mathematics 171; corequisite, Mathematics 147.

Perfect and imperfect competition. Monopoly. Utility vs. ranking of preferences. Relations between commodities. General equilibrium. Effects of taxes and controls of various kinds. Index numbers.

(1954-1955 and alternate years.) *Fall.* Mr. Hotelling.

183. ADVANCED MATHEMATICAL ECONOMICS (Statistics 183) (3). Prerequisites, Statistics 182 and Mathematics 141.

Dynamic variations in the economy. Calculus of variations and stochastic process theory with applications to economic problems. Valuation, depreciation, and depletion. Most profitable rates of exploitation of mineral and biological resources.

(1954-1955 and alternate years.) *Spring.* Mr. Hotelling.

185. BUSINESS CYCLES (3). Prerequisite, Economics 81 or equivalent.

Unemployment and its avoidance. A critical examination of theories of business fluctuations, and consideration of means of maintaining a high level of employment.

Fall. Mr. Philbrook.

191. AN INTRODUCTION TO THE LABOR PROBLEM (3).

A survey of the field of labor with emphasis on the labor force, the structure of the labor market, collective bargaining, wages, hours, and the hazards of modern industrial life.

Fall and spring. Messrs. Wolf, Guthrie, Ivey.

192. COLLECTIVE BARGAINING (3). Prerequisite, Economics 191 or equivalent.

This course deals with collective bargaining agencies, procedures, and the subject matter of collective bargaining. Cognizance is taken of the existing legal limitations on collective bargaining.

Spring. Mr. Wolf.

193. HISTORY OF THE LABOR MOVEMENT (3). Prerequisite, Economics 191 or equivalent.

A history of the labor movement in the United States, with some references to its development in other industrial countries. The main objectives of the labor movement and its economic consequences are stressed.

(1955-1956 and alternate years.) *Spring.* Mr. Guthrie.

194. SOCIAL INSURANCE (3). Prerequisite, Economics 191 or equivalent.

The origin and development of social insurance as a means of dealing with the hazards of modern industrial life. Special consideration of the development of social insurance systems in the United States.

(1954-1955 and alternate years.) *Spring.* Mr. Guthrie.

195. COMPARATIVE ECONOMIC SYSTEMS (3).

A review of the basic institutions of the present economic order, followed by a critical examination of the leading proposals for reform, including Socialism, Communism, Totalitarianism, Single Tax, Consumer Cooperation, and Social Insurance.

Fall and spring. Mr. Carroll.

197. GOVERNMENT AND BUSINESS (Political Science 197) (3).

The regulation and control of business by government. Constitutional provisions, the antitrust laws, public utilities, taxation, labor laws, and transportation are the fields explored.

Fall and spring. Messrs. Hobbs, Carter.

Courses for Graduates

200. ADVANCED ECONOMIC THEORY I (3).
Marginal analysis; partial and general equilibrium; pure competition; imperfect competition.
Fall. Mr. Pfouts.

201. ADVANCED ECONOMY THEORY II (3).
National income analysis: concepts and measurements of national income; determination of national income.
Spring. Mr. Ashby.

211. ADVANCED COMMODITY ECONOMICS (3). Prerequisite, Economics 111 or equivalent.
The supply and demand conditions of selected commodities representing certain types. The institutional factors affecting these conditions, with special reference to commodity control schemes.
Spring. Mr. Mouzon.

224. THE ECONOMICS OF MARKETING (3). Prerequisite, Economics 124 or equivalent.
An evaluation of marketing structure and practices in terms of economic costs and social needs. Emphasis placed on the application of economic principles in the solution of marketing problems.
Fall. Mr. McGregor.

235. ECONOMIC HISTORY OF EUROPE BEFORE 1750 (3).
A survey of economic institutions in the ancient world, a study of medieval agriculture, the rise of cities, the Commercial Revolution, and the earlier stages of the Industrial Revolution.
(1955-1956 and alternate years.) *Spring.*

236. ECONOMIC HISTORY OF EUROPE SINCE 1750 (3).
The evolution of modern economy in Europe and the United States. Emphasis on the Industrial Revolution and the changes which have accompanied it in agriculture, transportation, money and banking, trade, and the condition of laborers.
(1954-1955 and alternate years.) *Spring.*

241. HISTORY OF FISCAL DOCTRINES (3). Prerequisite, Economics 141 or equivalent.
Theories of distributive justice and taxation; the incidence and economic effects of taxation; and the use of fiscal measures as instruments of social control.
Fall.

242. PROBLEMS IN FEDERAL FINANCE (Political Science 292) (3). Prerequisite, Economics 141 or equivalent.
An advanced critical study of the problems of American national finance with particular reference to federal taxes and federal tax procedure.
(1955-1956 and alternate years.) *Fall.* Mr. Ashby.

244. INDUSTRIAL COMBINATIONS (3). Prerequisite, Economics 145 or permission of the instructor.
The nature and significance of the policies of the principal forms of industrial combinations in domestic and foreign trade. The alternative courses of government action with respect to such combinations.
(1955-1956 and alternate years.) *Spring.* Mr. Heath.

251-252. HISTORY OF ECONOMIC THOUGHT (3 hours each).
Economics 251 deals with the Classical, Historical, and Socialist schools; Economics 252 covers the marginalists and Marshall, the history of the consumption function, and the history of business cycle theory.
Fall and spring. Mr. Heath.

281. MONETARY THEORY (3).
Monetary systems in the light of theory and historical development. Evaluation of contemporary policies and reform proposals. Analysis of interrelationships between monetary factors and economic processes and phenomena.
Fall. Mr. Philbrook.

282. COMMERCIAL AND CENTRAL BANKING (3). Prerequisite, Economics 81 or equivalent.
The structure, functions, and operations of commercial and central banks with special reference to the Federal Reserve System. The policies of central banks as they relate to production, the national income, and the price level.
Spring. Messrs. O'Neil, Pierpont.

291. LABOR ECONOMICS (3). Prerequisite, Economics 191 or equivalent.
The economic implications of basic phenomena in the field of labor, including the demand for and supply of labor, wage theory, unemployment, the economics of reduced working hours, collective bargaining, and social insurance.
Spring. Mr. Wolf.

295. CASE STUDIES IN COMPARATIVE ECONOMIC SYSTEMS (3). Prerequisite, Economics 195.
Selected case studies in current proposals for reform in the economic system. Individual assignments are made for critical study and reports.
Spring. Mr. Carroll.

341. RESEARCH IN PUBLIC FINANCE (3).
Open to qualified graduate students who wish to make intensive studies under the supervision of the instructor in charge of particular fields of public finance. Conference hours subject to arrangement.
**Fall and spring.* Messrs. Spruill, Ashby.

NOTE: Registration for this course must be approved by the professor in charge.

351ab. SEMINAR IN ECONOMICS (3 each).
Designed to give the advanced graduate student an opportunity to deal critically with special problems or areas of theoretical analysis beyond the general scope of Economics 251-252.
**Fall and spring.* Messrs. Heath, Philbrook.

NOTE: Registration for this course must be approved by the professor in charge.

371. RESEARCH IN ECONOMIC STATISTICS (3).
**Spring.* Mr. Cowden.

NOTE: Registration for this course must be approved by the professor in charge.

382. SEMINAR IN PRIVATE FINANCE (3).
An advanced study of commercial banking, central banking policies, and the forces operating in the money and capital markets.
**Spring.* Mr. O'Neil.

NOTE: Registration for this course must be approved by the professor in charge.

* Equivalent of three hours a week.

385. ECONOMIC DYNAMICS (3).

The advanced study of business cycles. The modern controversy over employment and wages, interest, and money; anti-depression policy.

**Spring.* Mr. Philbrook.

NOTE: Registration for this course must be approved by the professor in charge.

391. SEMINAR IN LABOR (3).

This course offers mature students an opportunity to carry their investigations of significant subject matter beyond the limits of the formal course offerings.

**Fall and spring.* Messrs. Wolf, Guthrie.

NOTE: Registration for this course must be approved by the professor in charge.

399. SEMINAR (3).

Individual research in a special field under direction of a member of the department.

**Fall and spring.*

DEPARTMENT OF CHEMISTRY

Professors: ARTHUR ROE, †F. K. CAMERON, J. T. DOBBINS, H. D. CROCKFORD, E. C. MARKHAM, O. K. RICE, †F. H. EDMISTER, S. B. KNIGHT
Associate Professors: R. L. MCKEE, ‡S. Y. TYREE, J. F. BUNNETT, J. C. MORROW, III
Assistant Professors: KERRO KNOX, C. N. REILLEY
Instructors: D. B. BRIGHT, S. J. DAVIS
Research Associates: RAM GOPAL, M. T. JAQUISS, F. KOHLER, T. OKAMOTO
Teaching Fellows: M. G. BALDWIN, R. T. CAMPBELL, J. N. GODFREY
Teaching Assistants: T. E. AUSTIN, J. Y. BASSETT, J. H. BEDENBAUGH, F. E. CAREVIC, F. P. CHEN, T. C. DAVIS, V. M. DAY, G. H. DORITY, E. R. EPPERSON, ANNA B. FERGUSON, H. C. FINKLEA, G. P. HILDEBRAND, J. HOLLANDER, R. L. HOLT, C. E. HOUSTON, B. F. HRUTFIORD, F. R. LEMLEY, J. T. MACQUEEN, H. L. MEDFORD, W. D. MERRITT, K. L. PARKS, D. C. PRIEST, C. R. ROYSTON, J. K. RUFF, W. G. SCRIBNER, C. R. SPELL, G. T. WHITE, J. E. WISE.

For the A.B. with a major in chemistry, one of the following four sequences of courses may be selected: Chemistry 11-21, 43, 51, 61, 62, 44 or 83; or Chemistry 11-12, 21, 43, 61, 62, 44 or 83; or Chemistry 11-21, 43, 44, 51, 61, 64, 83; or Chemistry 11-12, 21, 43, 44, 61, 64, 83.

Those students who plan to teach in public high schools should read the statement on page 136.

§Bachelor of Science in Chemistry

FRESHMAN YEAR

Chemistry 11-21	Mathematics 7, 8 or 15, 16
or	German 3, 4
‖Chemistry 11-12	Hygiene 11
English 1, 2	Physical Education 1, 2
Social Science 1-2	

* Equivalent of three hours a week.
† Professor Emeritus.
‡ Absent on leave, 1954-1955.
§ This program meets the requirements of the American Chemical Society for the training of professional chemists.
‖ If the sequence 11-12 is followed, Chemistry 21 must be taken as a prerequisite to all other courses, and the number of chemistry elective courses will be reduced by one. (See page 223, footnote †.)

SOPHOMORE YEAR

Mathematics 31, 32
Physics 24-25 or 34-35
English 21
Chemistry 43, 44 and 21, if 12 is taken
*German 21
Physical Education 3, 4

JUNIOR YEAR

Chemistry 51
Chemistry 61, 62
Mathematics 33
Botany 41 or Zoology 41
Physics 104, 107
Elective, 1 non-science course

SENIOR YEAR

Chemistry 181, 182
English 59
†Chemistry electives, 3 courses
Non-science electives, 2 courses
Free elective, 1 course

Courses for Undergraduates

11-12 (Equivalent to Chemistry 1-2). GENERAL DESCRIPTIVE CHEMISTRY (10). No credit will be given for Chemistry 11 until either Chemistry 12 or Chemistry 21 is completed.

Three lecture and four laboratory hours a week, fall and spring. Laboratory fee, $4.50 a semester. Messrs. Markham, Bright, Bunnett, Crockford, Davis, Knight, Knox, Morrow, Reilley, Roe, Tyree; assistants.

11-21 (Equivalent to Chemistry 1-21). GENERAL DESCRIPTIVE CHEMISTRY AND QUALITATIVE ANALYSIS (10). No credit will be given for Chemistry 11 until either Chemistry 12 or Chemistry 21 is completed. Chemistry 21 and Chemistry 31 cannot both be taken for credit.

Three lecture and four laboratory hours a week, spring. Laboratory fee, Chemistry 11, $4.50; Chemistry 21, $11.50. Messrs. Markham, Bright, Bunnett, Crockford, Davis, Knight, Knox, Morrow, Reilley, Roe, Tyree; assistants.

31. QUALITATIVE ANALYSIS (4). Prerequisite, Chemistry 11-12, or equivalent.

For students who take Chemistry 11s and 12s in the Summer School. Transfer students with credit for general chemistry without qualitative analysis must take Chemistry 21.

Two lecture and four laboratory hours a week, fall and spring. Laboratory fee, $10.00. Messrs. Markham, Knight, Reilley; assistants.

43. ELEMENTARY QUANTITATIVE ANALYSIS (5). Prerequisite, Chemistry 21 or Chemistry 31.

Beginning quantitative analysis emphasizing both volumetric and gravimetric techniques.

Two lecture and six laboratory hours a week, fall and spring. Laboratory fee, $11.50. Messrs. Markham, Knight, Reilley.

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* It is understood that the language requirements of the General College must be satisfied.

† Three chemistry elective courses to total a minimum of eight semester hours, not more than two courses to be taken in any one of the four divisions of chemistry: analytical, inorganic, organic, physical.

44. QUANTITATIVE ANALYSIS: SECOND COURSE (5). Prerequisite, Chemistry 43.

A continuation of gravimetric and volumetric chemistry and an introduction to other analytical techniques.

Two lecture and six laboratory hours a week, spring. Laboratory fee, $11.50. Messrs. Markham, Knight, Reilley.

51. INORGANIC CHEMISTRY (4). Prerequisite, Chemistry 21 or Chemistry 31, or equivalent.

Three lecture and two laboratory hours a week, fall. Laboratory fee, $7.50. Messrs. Knight, Tyree, Knox, Davis; assistants.

61, 62. ORGANIC CHEMISTRY (6 each). Prerequisite, Chemistry 21 or 31.

Three lecture and six laboratory hours a week, both courses offered fall and spring. Laboratory fee, $15.00 a semester. Messrs. Roe, McKee, Bunnett, Bright.

64. ORGANIC CHEMISTRY (2). Prerequisite, Chemistry 61.

Designed for premedical students and A.B. chemists. No credit given for this course if Chemistry 62 (as offered on the semester basis) is taken.

Two hours a week, spring. Messrs. Roe, McKee, Bunnett, Bright.

83. PHYSICAL CHEMISTRY FOR PREMEDICAL STUDENTS (4). Prerequisites, Chemistry 43, 61, Mathematics 7, 8, and one year of college physics. Does not carry credit toward the B.S. degree in Chemistry.

Designed for A.B. students or students taking premedical, pharmaceutical, or biological work.

Three lecture and two laboratory hours a week, spring. Laboratory fee, $5.00. Messrs. Crockford, Morrow.

Courses for Graduates and Advanced Undergraduates

101. SPECIAL PROBLEMS IN CHEMISTRY (1 to 2). Prerequisite, to be determined by consultation.

Equivalent of one to two hours a week, every semester. Laboratory fee, to be determined by consultation with adviser or chairman of the department. Any member of the departmental staff.

143. THEORETICAL ANALYTICAL CHEMISTRY (3). Prerequisites, Chemistry 43, 44.

Three hours a week, fall. Mr. Dobbins.

145. INSTRUMENTAL ANALYSIS. ELECTRICAL METHODS (4). Prerequisites, Chemistry 43, 44, one year of college physics.

Two lecture and four laboratory hours a week, fall. Laboratory fee, $10.00 Messrs. Markham, Knight, Reilley.

146. INSTRUMENTAL ANALYSIS. OPTICAL METHODS (4). Prerequisites, Chemistry 43, 44, one year of college physics.

Two lecture and four laboratory hours a week, spring. Laboratory fee, $10.00. Messrs. Markham, Knight, Reilley.

147. QUANTITATIVE ORGANIC MICROANALYSIS (2). Prerequisites, Chemistry 43, 44, 62.

Four laboratory hours a week, spring. Laboratory fee, $10.00. Messrs. Markham, McKee.

151, 152. ADVANCED INORGANIC CHEMISTRY (3 each). Prerequisites or corequisites, Chemistry 181, 182.

Three hours a week, fall and spring. Messrs. Tyree, Knox.

154. INORGANIC PREPARATIONS (2). Prerequisite, Chemistry 51; prerequisites or corequisites, Chemistry 181, 182.

Four laboratory hours a week, fall or spring. Laboratory fee, $10.00. Messrs. Tyree, Knox.

163. QUALITATIVE ORGANIC ANALYSIS (5). Prerequisite, Chemistry 61, 62.

Two lecture and six laboratory hours a week, fall. Laboratory fee, $10.00. Messrs. Roe, McKee.

164. QUANTITATIVE ANALYSIS OF FUNCTIONAL GROUPS (2). Prerequisite, Chemistry 163.

Four laboratory hours a week, spring. Laboratory fee, $10.00. Messrs. Roe, McKee.

166a, 167a. ADVANCED ORGANIC CHEMISTRY I (3 each). Prerequisite or corequisite, Chemistry 163.

Three hours a week, fall and spring. Messrs. Roe, Bunnett, McKee.

166b, 167b, 168b. ADVANCED ORGANIC CHEMISTRY II (2 each). Prerequisite or corequisite, Chemistry 163.

Chemistry 166b, carbohydrates; Chemistry 167b, stereochemistry; Chemistry 168b, heterocyclics. Each course given every two years or oftener.

Two hours a week, fall or spring. Messrs. Roe, McKee.

166c, 167c. ADVANCED ORGANIC PREPARATIONS (2 each). Prerequisite or corequisite, Chemistry 163.

Four laboratory hours a week, fall and spring. Laboratory fee, $10.00. Mr. Roe.

172. RADIOCHEMISTRY (2). Prerequisites, Chemistry 21 or 31, Physics 24, 25, and at least senior standing.

Two hours a week, fall. Messrs. Tyree, Knox, others.

173. LABORATORY TECHNIQUES IN RADIOCHEMISTRY (2). Prerequisite, Chemistry 172, or equivalent.

Four laboratory hours a week, spring. Laboratory fee, $10.00. Messrs. Tyree, Knox, others.

181, 182. PHYSICAL CHEMISTRY (6 each). Prerequisites, Chemistry 43 or its equivalent, satisfactory work in physics and integral and differential calculus. Prerequisites or corequisites, Chemistry 61, 62.

Three lecture and six laboratory hours a week, fall and spring. Laboratory fee, $15.00 a semester. Messrs. Crockford, Rice, Morrow.

184, 185. CHEMICAL THERMODYNAMICS (3 each). Prerequisites, Chemistry 181, 182.

Chemistry 184, consisting of the basic principles of thermodynamics, is offered every year. Chemistry 185, advanced topics, is offered in 1955 and in alternate years.

Three hours a week, fall and spring. Messrs. Crockford, Morrow.

187. ADVANCED PHYSICAL CHEMISTRY (3). Prerequisites, Chemistry 181, 182.

(1954-1955 and alternate years.) *Three hours a week, fall.* Messrs. Crockford, Morrow.

188. REACTION KINETICS (3). Prerequisites, Chemistry 181, 182.

Three hours a week, spring. Messrs. Crockford, Morrow.

191, 192. INDUSTRIAL CHEMISTRY (3 each). Prerequisites, Chemistry 61, 62.

Three hours a week, fall and spring. Messrs. Morrow, Bright.

Courses for Graduates

231. DETECTION OF POISONS (4). Prerequisites, Chemistry 21 or 31, 43, 62.
(1955-1956 and alternate years.) *Two lecture and four laboratory hours a week, spring. Laboratory fee, $10.00.* Mr. Dobbins.

242, 243. SEMINAR IN ANALYTICAL CHEMISTRY (3 each). Prerequisite or corequisite, Chemistry 143.
Three hours a week, fall and spring. Mr. Dobbins.

244, 245, 246. SPECIAL TOPICS IN ANALYTICAL CHEMISTRY (2 each). Prerequisite, Chemistry 182.
(244, 245, 1955-1956 and alternate years; 246, 1956-1957 and alternate years.) *Two hours a week, fall and spring.* Messrs. Markham, Knight, Reilley.

251, 252. SPECIAL TOPICS IN INORGANIC CHEMISTRY (2 each). Prerequisites, Chemistry 151, 152.
Two hours a week, fall and spring. Messrs. Tyree, Knox.

254. SEMINAR IN INORGANIC CHEMISTRY (2). Prerequisites, Chemistry 151, 152.
(1954-1955 and alternate years.) *Two hours a week, spring.* Messrs. Tyree, Knox.

255. SEMINAR IN INORGANIC CHEMISTRY (2). Prerequisites, Chemistry 151, 152.
(1955-1956 and alternate years.) *Two hours a week, spring.* Messrs. Tyree, Knox.

258, 259. HISTORY OF CHEMISTRY (2 each). Prerequisites, Chemistry 21 or 31, 61, 62.
Two hours a week, fall and spring. Staff.

261, 262. SEMINAR IN ORGANIC CHEMISTRY (3 each). Prerequisites, Chemistry 166a, 167a, or Chemistry 166b, 167b.
(1955-1956 and alternate years.) *Three hours, or equivalent, a week, fall and spring.* Messrs. Roe, McKee, Bunnett.

263. ORGANIC REACTION MECHANISMS (3). Prerequisites, Chemistry 166a, 167a, 181, 182.
(1954-1955 and alternate years.) *Three hours, or equivalent, a week, fall.* Mr. Bunnett.

264, 265. SEMINAR IN ORGANIC CHEMISTRY (3 each). Prerequisites, Chemistry 166a, 167a, or Chemistry 166b, 167b.
(1954-1955 and alternate years.) *Three hours, or equivalent, a week, fall and spring.* Messrs. Roe, McKee.

267. ORGANIC CHEMISTRY (3 to 6). Prerequisite, to be determined by consultation with professor in charge.
Three to six hours a week, every semester. Laboratory fee, to be determined by consultation with professor in charge. Messrs. Roe, McKee, Bunnett, Bright.

281. ATOMIC AND MOLECULAR CHEMISTRY (3). Prerequisites, Chemistry 181, 182.
Three hours a week, fall. Mr. Rice.

282. CHEMICAL BINDING AND VALENCE (3). Prerequisite, Chemistry 281.
(1954-1955 and alternate years.) *Three hours a week, spring.* Mr. Rice.

284. STATISTICAL MECHANICAL PROBLEMS IN CHEMISTRY (4). Prerequisite, Chemistry 281.
(1955-1956 and alternate years.) *Four hours a week, spring.* Mr. Rice.

286, 287. SEMINAR IN PHYSICAL CHEMISTRY (3 each). Prerequisites, Chemistry 181, 182.
Three hours a week, fall and spring. Messrs. Crockford, Rice.

RESEARCH COURSES.
Laboratory fee, $15.00 a course.

301. THESIS RESEARCH (6).
Graduate Staff

341. ANALYTICAL CHEMISTRY (6).
Messrs. Dobbins, Markham, Knight, Reilley.

351. INORGANIC CHEMISTRY (6).
Messrs. Tyree, Knox.

361. ORGANIC CHEMISTRY (6).
Messrs. Roe, McKee, Bunnett, Bright.

381. PHYSICAL CHEMISTRY (6).
Messrs. Crockford, Rice, Morrow.

DEPARTMENT OF CITY AND REGIONAL PLANNING

Professors: J. A. PARKER, *H. G. BAITY, F. S. CHAPIN, JR., P. P. GREEN, J. J. WRIGHT
Associate Professors: E. T. CHANLETT, F. N. CLEAVELAND, J. M. WEBB
Graduate Assistants: RUTH L. MACE, WILLIAM R. RUGG

In addition to the above, Professor W. F. Babcock of the School of Engineering, North Carolina State College, contributes to the program of the department.

The work offered in the Department of City and Regional Planning leads to the degree of Master of Regional Planning. The normal course includes three semesters of residence study, a summer of internship, and a thesis.

The demand for persons trained in the field of city and regional planning considerably exceeds the supply. Requests are received almost daily from private consulting firms, and from planning agencies at the local, state, regional and national level in all parts of the country for persons holding the master's degree in planning.

A bachelor's degree from an accredited institution in one of the following fields is required for admission: architecture, business administration, economics, engineering, geography, history, the humanities, landscape architecture, law, political science, public administration, or sociology. Applicants holding undergraduate degrees in fields not listed above may submit their credentials for consideration.

The program leading to the master's degree, and opportunities in the field of city and regional planning are described in detail in a separate bulletin of the Department of City and Regional Plan-

* Absent on leave, 1954-1955.

ning, which may be obtained by addressing a request to the Department.

Courses for Graduates and Advanced Undergraduates

100. PRINCIPLES OF STATISTICAL INFERENCE (Statistics 100) (3). Prerequisite, college algebra.

Introduction to fundamental concepts of statistical inference. The role of statistical thinking in scientific method. Uses and limitations of inverse probability. Modern notions of statistical tests as rules of inductive behavior.

Fall. Mr. Nicholson.

127. TRAFFIC AND TRANSPORTATION (3).

Study of traffic, transportation, and circulation related to planning programs, and dealing with highway, airport, and railroad location and terminal facilities; with traffic and parking surveys and control; and with transportation.

Spring. Mr. Babcock.

170. ECONOMIC STATISTICS (Economics 170) (3). Prerequisites, Mathematics 7, 8 or 10, Economics 31-32 or equivalents.

This course provides training in the important process of statistical technique used by economists and business men. Topics covered include methods of sampling, collection of data, tabular and graphic presentation, frequency distributions, tests of significance, analysis of time series, and simple correlation.

Fall and spring. Laboratory fee, $3.00. Messrs. Cowden, Pfouts, Fein, Curry.

191. SOCIAL STATISTICS (Sociology 191) (3).

The topics usually covered in an elementary statistics course are treated with emphasis on those best adapted to sociological research. With laboratory materials of a sociological nature, the student in learning the process of statistical analysis may become familiar with sources, interpretation, and presentation of social data.

Fall. Laboratory fee, $2.00. Mr. Price.

Courses for Graduates

205. MUNICIPAL FACILITIES AND MANAGEMENT (3).

Study of the broader aspects of public health sanitation and municipal engineering as they relate to the planning, development, and administration of communities.

Fall. Messrs. Baity, Wright, Chanlett.

209. PLANNING AND GOVERNMENT (Political Science 209) (3).

The evolution of planning in the United States, the activities of planning agencies, planning problems at various levels of American government. Special emphasis is given to planning as a governmental process.

Fall. Mr. Cleaveland.

215. THEORY OF PLANNING (3).

Study of urban conditions and trends and theories of urban form.

Fall. Mr. Parker.

220. SITE PLANNING (3).

Principles of site planning and construction with particular reference to contemporary land subdivision design practice, including grading, drainage, roadways, walks, construction and development costs and their relation to design and layout. *(Individual student expenses in this course amount to approximately $10.00).*

Fall. Mr. Webb.

221. THE MODEL COMMUNITY (3).
Present-day city planning design concepts and criteria as applied to planning of new communities. The course covers the development of the program for a model town; an analysis of basic factors of population, economy, and land use; and the development of the physical plan for the town. *(Individual student expenses in this course amount to approximately $10.00.)*
Fall. Mr. Webb.

222. URBAN PLANNING PRACTICE (3).
The study of an existing community: a survey of existing social, economic, and physical conditions, and preparation of a physical plan and a planning program.
Spring. Staff.

223. ADVANCED PLANNING DESIGN (3).
Studies of problem areas such as residential, commercial, or industrial slums. Areas are selected and studied in the field; social, economic, and physical characteristics determined; and a renewal or improvement program developed. *(Individual student expenses in this course amount to approximately $10.00.)*
Fall. Messrs. Chapin and Parker.

227. URBAN RENEWAL (3).
An introduction to the social, economic, and physical bases of urban redevelopment, rehabilitation and other processes of urban renewal; a study of organization and administration of federal-local urban renewal programs; and an analysis and evaluation of urban renewal procedures.
Fall. Mr. Chapin.

230. PLANNING LEGISLATION (3).
Enabling legislation for planning; urban, rural, and county zoning; subdivision and other land use controls; urban redevelopment law; housing legislation; and limited access highway legislation.
Fall. Mr. Green.

235. URBAN PLANNING METHODS AND TECHNIQUES (3).
Analysis and evaluation of methods and techniques employed in carrying out planning studies in the course of developing a comprehensive plan for an urban area.
Spring. Mr. Chapin.

240. PLANNING INTERNSHIP (3). Prerequisite, one semester's work in the City and Regional Planning curriculum.
One summer's work as an employee of an approved planning office or agency under competent supervision. This course constitutes a full load for a summer session.
Summer session. Mr. Parker.

310. PLANNING RESEARCH SEMINAR (3).
Field research and study on selected planning problems under special guidance of a member of the staff.
Either semester. Professors in the Department of City and Regional Planning.

320. THESIS (3).
Study and presentation of a planning project selected by the student and approved by the department. Credit is given upon acceptance of the thesis.
Either semester. Professors in the Department of City and Regional Planning.

The Following List is Illustrative of the Courses from Which Department Electives Are Chosen

Department of Economics

111. International Resources and National Policy
124. Principles of Marketing
131. Economic Theory
135. Economic History
141. Public Finance
143. Problems in State and Local Finance
151. Transportation
153. Public Utilities
168. Sales and Market Analysis
341. Research Course in Public Finance

Department of Political Science

101. Public Administration
132. Municipal Government in the United States
133. Municipal Administration in the United States
181. Recent National Policy and Administration
185. Financial Administration
191. Public Finance
193. Problems in State and Local Finance
210. Public Administration of Resources
225. Administrative Organization and Management
331. Problems in Public Administration
341. Seminar Course

Department of Sociology

110. Rural Land Planning and Land Economics
153. Social Structure
154. Contemporary Society
168. The City
169. The Industrial Community
173. Community Recreation
180. State and Regional Problems and Planning
181. Regional Sociology of the South
186. Population
197. Population Statistics
208. Methods in Social Research
218. Human Ecology
274. Community Organization
301, 302, 303. Graduate Research Seminar

DEPARTMENT OF CLASSICS

Professors: B. L. ULLMAN, J. P. HARLAND, P. H. EPPS, WALTER ALLEN, JR., A. I. SUSKIN
Visiting Lecturer: ALICE S. WILSON
Part-time Instructors: EDDIE E. BEST, JR., CHARLES J. GROSS, JR.
Teaching Fellow: TALBOT R. SELBY
Graduate Assistants: B. R. REECE, D. V. ESTES

GREEK

Students interested in having their undergraduate major in Greek should consult the department in the last quarter of their sophomore year. Six courses are required in addition to Greek 4. Students interested in a combined major in Latin and Greek should consult the Department of Classics. For Greek as satisfying the language requirements for the A.B. degree see page 113.

Courses for Undergraduates

1-2. ELEMENTARY GREEK (3 each).
Fall and spring. Mrs. Wilson.

1-2 combined (6 hours).
Fall. Mr. Epps.

NOTE: Two semesters of Greek or Latin or mathematics must be taken by each candidate for the degree of A.B.

*3-4 INTERMEDIATE GREEK (3 each).
Spring and fall. Mr. Epps.

NOTE: Majors in religion may substitute 3N (Elementary New Testament).

14. ELEMENTARY GREEK FOR GRADUATE STUDENTS (No credit).
One semester. Mr. Epps.

*21, 22. ADVANCED GREEK (3 each). Prerequisite, Greek 4 or equivalent.
Fall and spring. Mr. Epps, Mrs. Wilson.

NOTE: Students so desiring may substitute Greek 88 for Greek 21 or 22.

80. HOMER, ILIAD (3). Prerequisite, Greek 22 or equivalent.
One semester. Mr. Epps.

82. PLATO (3). Prerequisite, Greek 22 or equivalent.
One semester. Mr. Epps.

88. GREEK NEW TESTAMENT (3). Prerequisite, Greek 4 or equivalent.
Spring. Mr. Epps.

Courses for Graduates and Advanced Undergraduates

112. HOMER, ODYSSEY OR ILIAD (3). Prerequisite, Greek 22 or equivalent.
One semester. Mr. Epps.

153. GREEK TRAGEDY (in Greek) (3). Prerequisite, Greek 22 or equivalent.
Spring. Mr. Epps.

* Either of these courses may be taken separately for elective credit.

154. GREEK COMEDY (in Greek) (3). Prerequisite, Greek 22 or equivalent.
One semester. Mr. Epps.

158. GREEK NEW TESTAMENT (3). Prerequisite, Greek 22.
One semester. Mr. Epps.

171. GREEK HISTORIANS (3). Prerequisite, Greek 22 or equivalent.
One semester. Mr. Epps.

181. GREEK ORATORS (3). Prerequisite, Greek 22 or equivalent.
One semester. Mr. Epps.

182. PLATO (3). Prerequisite, Greek 22 or equivalent.
Fall. Mr. Epps.

For additional courses see below under Courses Requiring No Knowledge of the Greek or Latin Language and under Comparative Literature. Attention is called also to courses in the Department of Comparative Linguistics.

LATIN

Students interested in having their undergraduate major in Latin should consult the department in the last quarter of their sophomore year. Six courses are required in addition to Latin 4. Students interested in a combined major in Latin and Greek should consult the Department of Classics. For Latin as satisfying the language requirements for the A.B. degree see page 113.

Courses for Undergraduates

1-2. ELEMENTARY LATIN (3 each).
Fall and spring. Miss Kline, Messrs. Best, Gross, Selby, Suskin.

NOTE: Two semesters of Greek or Latin or mathematics must be taken by each candidate for the degree of A.B.

*3-4. INTERMEDIATE LATIN (3 each).
3: Cicero. 4: Virgil. Freshman and sophomore elective.
Fall and spring. Mrs. Wilson, Mr. Suskin.

3X. INTERMEDIATE LATIN (3).
For students who had two years of Latin in high school but find Latin 3 too difficult. The course begins with a thorough review of elementary Latin.
Five hours a week, 3 credits.

14. RAPID READING IN LATIN (3).
May be taken with or without credit by those who wish to refresh their ability to read Latin prose. Class needs will determine selection of authors.
One semester. Mr. Suskin.

*21, 22. ADVANCED LATIN (3 each). Prerequisite, three or four units of high school Latin, or Latin 3-4.
Freshman and sophomore elective.
Selections from Latin prose and verse, chiefly Livy and Horace.
21: *Fall and spring,* 22: *spring.* Mrs. Wilson, Mr. Suskin.

* Either of these courses may be taken separately for elective credit.

51. CICERO'S LETTERS (3). Prerequisite, Latin 22.
One semester. Mr. Suskin.

52. ROMAN SATIRE (3). Prerequisite, Latin 22.
Spring. Mr. Suskin.

53. LATIN LYRIC POETRY (3). Prerequisite, Latin 22.
Fall semester.

71. COURSE FOR TEACHERS (3). Prerequisite, Latin 22.
On application. Mr. Ullman.

Courses for Graduates and Advanced Undergraduates

101. ROMAN HISTORICAL LITERATURE, TACITUS OR SUETONIUS (3). Prerequisite, Latin 22.
Spring. Mr. Allen.

102. ROMAN DRAMATIC LITERATURE, PLAUTUS AND TERENCE (3). Prerequisite, Latin 22.
One semester. Mr. Ullman.

103. PROSE WRITINGS OF THE REPUBLIC (3). Prerequisite, Latin 22.
One semester. Mr. Suskin.

104. CICERO: POLITICAL CAREER AND WORKS (3). Prerequisite, Latin 22.
The course deals with Cicero's *Letters* or *Orations,* as determined by the needs of the class.
Fall. Mr. Allen.

105. JUVENAL (3). Prerequisite, Latin 22.
One semester. Mr. Ullman.

106. LUCRETIUS (3). Prerequisite, Latin 22.
One semester. Mr. Ullman.

107. LATIN COMPOSITION (3). Prerequisite, Latin 22.
Fall. Mr. Allen.

108. MARTIAL (3). Prerequisite, Latin 22.
One semester. Mr. Ullman.

109. CICERO: PHILOSOPHICAL WORKS (3). Prerequisite, Latin 22.
One semester. Mr. Ullman.

110. MEDIEVAL LATIN (3). Prerequisite, Latin 22.
Reading of selections from representative writers in prose and poetry.
Fall. Mr. Ullman.

112. ROMAN ELEGY (3). Prerequisite, Latin 22.
One semester. Mr. Ullman.

113. LIVY (3). Prerequisite, Latin 22.
One semester. Mr. Suskin.

117. VIRGIL (3). Prerequisite, Latin 22.
One semester. Mr. Ullman.

121. PETRONIUS (3).
The relation of Petronius to satire and to development of the novel; introduction to Vulgar Latin.
Spring semester. Mr. Ullman.

122. LUCAN (3). Prerequisite, Latin 22.
Reading of most of *The Civil War* in Latin; consideration of Lucan's place in the literature of the Silver Age and in the tradition of epic poetry, together with a study of his historical accuracy.
One semester. Mr. Allen.

131. LATIN WRITERS OF THE ITALIAN RENAISSANCE (3). Prerequisite, Latin 22.
Reading of selections beginning with Petrarch, with some consideration of the origin of the Renaissance.
One semester. Mr. Ullman.

Courses for Graduates

202. LATIN EPIGRAPHY (3).
One semester. Mr. Ullman.

203. LATIN PALEOGRAPHY (3).
One semester. Mr. Ullman.

301-302. LATIN SEMINAR
Fall and spring. Mr. Ullman.

310. THESIS COURSE
Either semester. Messrs. Ullman, Allen, Suskin.

CLASSICS IN ENGLISH

(Courses Requiring No Knowledge of the Greek or Latin Language)

The following courses in classical literature and civilization are especially designed to supply the necessary foundation for those who, without a reading knowledge of the ancient languages, wish a broader culture, or plan to specialize in modern literature, history, arts, etc. When properly approved, they will be allowed to count as part of the major requirement in other departments. They may be taken also to satisfy the requirements of a minor in literature. Courses 61 and 62 may be substituted for English 3 and 4 by students taking a modern foreign language. See also under Comparative Literature.

Courses for Undergraduates

61. GREEK LITERATURE (3).
A survey of the major authors and their contributions to modern thought and literary forms.
Fall. Mrs. Wilson.

62. LATIN LITERATURE (3).
A survey of the major authors and their contributions to modern thought and literary forms.
Spring. Mr. Suskin.

75. GREEK CIVILIZATION (3).
The achievements of the ancient Greeks and their contributions to the modern world in art, architecture, medicine, science, politics, education, theater, religion, etc.
One semester. Mr. Harland.

76. ROMAN CIVILIZATION (3).
Roman public and private life, manners, and ideals; buildings, living conditions, commerce, religion, government, art, etc.
Fall. Mr. Allen.

77. GREEK MYTHOLOGY (3).
An introduction to mythology, followed by a study of the various cycles of myths which developed in ancient Greece. Illustrations from sculpture and vase-paintings.
Spring. Mr. Harland

85. ARCHAEOLOGY AND THE BIBLE (3).
Biblical history in the light of excavations in Palestine and the ancient Near East. The art and civilization of the peoples of the Old Testament.
Fall. Mr. Harland.

91. ARCHAEOLOGY OF THE NEAR EAST (3).
The art and architecture of Egypt, Mesopotamia, and the rest of the ancient near East.
Fall. Mr. Harland.

92. GREEK ARCHAEOLOGY (3).
This historical development of the art of Greece from the Bronze Age through the historical period. Greek architecture, painting, and the other arts.
Spring. Mr. Harland.

93. GREEK SCULPTURE (3).
The development of Greek sculpture as one phase of the civilization of the ancient Hellenes.
Spring. Mr. Harland.

95. ANCIENT ARCHITECTURE (3).
The architecture of Egypt, Mesopotamia, Greece, and Rome, with emphasis on the contributions made by these lands to modern architecture.
One semester. Mr. Harland.

97. ROMAN ART (3).
The arts of Rome, particularly architecture, sculpture, and painting, preceded by a survey of Etruscan and Hellenic art and their influence on Rome.
One semester. Mr. Harland.

Courses for Graduates and Advanced Undergraduates

103. GREEK AND ROMAN EPIC (3).
Reading of the ancient epics, with emphasis on Homer and Virgil. Structure of the poems, history of epic as a literary form, the poems as expressions of the spirit of their ages.
Spring. Mr. Allen.

107. GREEK DRAMATIC LITERATURE (3).
Reading of about fifteen Greek plays. Origin and growth of the Greek theater and drama; Aristotle's *Poetics;* literary quality of the plays; religious, social, and political ideas of the fifth century B.C.
Fall. Mr. Allen.

109. GREEK AND ROMAN HISTORICAL LITERATURE (History 109) (3). The study in English translation of selections from Herodotus, Thucydides, Livy, Tacitus, and others, with consideration of their literary qualities and their reliability as historians.

Spring. Mr. Allen.

114. GREEK AND ROMAN COMEDY (3).

One semester. Messrs. Epps, Allen.

176. ROMAN CIVILIZATION (3).

One semester. Mr. Allen.

193. HELLENIC ART (3). Prerequisite, Archaeology 92 or 93, or Greek 75, or Greek history.

One semester, on application. Mr. Harland.

195. THE AEGEAN CIVILIZATION (3). Prerequisite, Archaeology 91, or ancient history.

One semester, on application. Mr. Harland.

CURRICULUM IN COMPARATIVE LINGUISTICS

DEAN W. W. PIERSON, *Chairman*

Professors: N. E. ELIASON, *Secretary*, J. R. GASKIN, U. T. HOLMES, G. S. LANE, R. W. LINKER, J. E. KELLER, B. L. ULLMAN

This curriculum includes linguistic courses offered in various departments of the University and other courses needed by students specializing in linguistic work.

Students may offer comparative linguistics as their major or minor field for the A.M. or Ph.D. degrees.

For an A.M. or Ph.D. minor in comparative linguistics, the prerequisites are an undergraduate minor, or its equivalent, in a department of language or literature at the University and a knowledge of two foreign languages, one of them French or German.

For an A.M. or Ph.D. major in comparative linguistics, the prerequisites are an undergraduate major, or its equivalent, in a department of language or literature at the University and a knowledge of two modern foreign languages, one of them French or German, and one classical language. Students must also have an understanding of the history and development of the English language.

Students desiring to major or minor in comparative linguistics must have their proposed program of studies approved by the secretary of this curriculum.

General

101. INTRODUCTION TO THE STUDY OF LANGUAGE (3). The course will cover the main principles of the scientific study of language from both the descriptive and the historical points of view. The descriptive materials will include general phonetics and phonemics and problems of morphological analysis applied to languages of various types of structure. This will be

followed by an introduction to the use of the comparative method in the reconstruction of language history and a survey of the results of that method as achieved during the nineteenth and twentieth centuries.
Spring. Mr. Lane.

105. CELTIC: OLD IRISH (3).
Rapid sketch of morphology and readings in Old and Middle Irish, especially from Strachan, *Selections from the Tain.* Lectures on historical Irish grammar.
Fall. Mr. Holmes.

106. CELTIC: OLD WELSH (3).
Introduction to Modern and Middle Welsh. Texts: Evans, *A First Welsh Reader* and Strachan, *Introduction to Early Welsh.* Historical development of the Welsh language.
Fall, on demand. Mr. Holmes.

111, 112. BEGINNING SANSKRIT (3 each).
Grammar and readings from the epic and didactic literature. Supplementary lectures intended to serve as a basis for Indo-European comparative grammar.
(1954-1955 and alternate years.) *Both semesters.* Mr. Lane.

201, 202. ADVANCED SANSKRIT (3 each).
Extensive reading from the Dharmaçāstra, the Sūtras and Brahmanas, and the Vedas.
Both semesters, on demand. Mr. Lane.

204. COMPARATIVE GRAMMAR OF GREEK AND LATIN (3).
Designed not only for the student of Classics but also as a basic course for students of comparative Indo-European grammar.
(1954-1955 and alternate years.) *Fall.* Mr. Lane.

206. LITHUANIAN (3).
Introduction to the historical grammar of the Baltic languages.
Fall, on demand. Mr. Lane.

207. CHURCH SLAVIC (3).
Introduction to the historical grammar of the Slavic languages.
Spring, on demand. Mr. Lane.

341. THESIS (3).
Both semesters. Staff.

361, 362. SEMINAR IN LINGUISTICS (3 each).
Both semesters, on demand. Staff.

English Linguistics

101. OLD ENGLISH GRAMMAR AND READING (3).
Fall. Mr. Eliason.

201. OLD ENGLISH: BEOWULF (3). Prerequisite, English 101.
Spring. Mr. Eliason.

204. HISTORY OF THE ENGLISH LANGUAGE (3). Prerequisite, English 101 or permission of the instructor.
Spring. Mr. Eliason.

Germanic Linguistics

161. HISTORY OF THE GERMAN LANGUAGE (3).
Fall, on demand. Mr. Lane.

221. GOTHIC (3).
(1955-1956 and alternate years.) *Fall.* Mr. Lane.

222. OLD HIGH GERMAN (3).
(1955-1956 and alternate years.) *Spring.* Mr. Lane.

223. COMPARATIVE GERMANIC GRAMMAR (3).
Spring, on demand. Mr. Lane.

232. OLD SAXON (3).
Spring, on demand. Mr. Lane.

233, 234. OLD NORSE (3 each).
Both semesters, on demand. Mr. Lane.

Classical Linguistics

202. LATIN EPIGRAPHY (3).
Time to be arranged. Mr. Ullman.

203. LATIN PALEOGRAPHY (3).
Time to be arranged. Mr. Ullman.

Romance Linguistics

126. HISTORY OF THE FRENCH LANGUAGE (3). Prerequisite, French 72.
Spring. Messrs. Holmes, Linker.

220. VULGAR LATIN (3).
Fall. Mr. Holmes.

221, 222. OLD FRENCH (3 each).
Fall and spring. Mr. Holmes.

225. PROVENÇAL (3).
Spring. Messrs. Linker and Holmes.

221. OLD ITALIAN (3).
Fall. Mr. Holmes.

221, 222. OLD SPANISH (3 each).
Fall and spring. Mr. Keller.

221. OLD PORTUGUESE (3).
Spring. Mr. Holmes.

324. ROMANCE PALEOGRAPHY (3).
(1954-1955 and alternate years.) *Fall.* Mr. Linker.

370. MINOR ROMANCE TONGUES (3).
Spring. Mr. Holmes.

DEPARTMENT OF COMPARATIVE LITERATURE

Professors: H. R. HUSE, *Acting Chairman*, U. T. HOLMES, JR., A. P. HUDSON, A. C. HOWELL, R. P. BOND, S. A. STOUDEMIRE, W. L. WILEY, P. H. EPPS, *W. P. FRIEDERICH, WALTER ALLEN, JR., R. W. LINKER
Associate Professor: A. I. SUSKIN, KAI JURGENSEN, H. W. REICHERT
Visiting Lecturer: MRS. ALICE S. WILSON

An undergraduate major in the department consists normally of six to eight courses, two of which must be in the classics. Students are encouraged to substitute courses in the original languages whenever possible.

LITERATURE IN ENGLISH TRANSLATION

Courses for Undergraduates

61. GREEK LITERATURE (3).
A survey of the major authors and their contributions to modern thought and literary forms.
Fall. Mrs. Wilson.

62. LATIN LITERATURE (3).
A survey of the major authors and their contributions to modern thought and literary forms.
Spring. Mr. Suskin.

65. ORIENTAL LITERATURE (3).
A rapid survey of interesting features in the literature, language, and civilization of China, Japan, India, and Arabia.
Spring. Mr. Holmes.

87. LITERARY ASPECTS OF THE BIBLE (Religion 87) (3).
The Old and New Testament will be taken up in alternate years.
Spring. Mr. Howell.

Courses for Graduates and Advanced Undergraduates

117. CERVANTES (3).
A study of Cervantes' *Don Quixote* and the *Exemplary Novels.*
Fall. Mr. Stoudemire.

135. FRENCH CLASSICISM (3).
A survey of the origins of classicism in France. The plays of Corneille, Molière, Racine, and their contemporaries. The decline of classicism.
Spring. Mr. Wiley.

137. SURVEY OF GERMAN LITERATURE IN ENGLISH TRANSLATION (3).
An outline emphasizing the masterpieces around 1200, the works of the pre-classic and classic periods, and contemporary literature.
Fall. Mr. Reichert.

155. GOETHE (3).
Goethe's life and works placed against a background of European classicism and romanticism.
Fall. Mr. Friederich.

* Absent on leave, spring semester, 1955, and fall semester, 1955-1956.

156. DANTE (3).
The beginnings of Italian literature. The *Vita Nuova* and *The Divine Comedy*.
Spring. Mr. Huse.

COMPARATIVE COURSES

Courses for Graduates and Advanced Undergraduates

103. GREEK AND ROMAN EPIC (3).
Reading of the ancient epics, with emphasis on Homer and Virgil. Structure of the poems, history of the epic as a literary form, the poems as expressions of the spirit of their ages.
Spring. Mr. Allen.

107. GREEK DRAMATIC LITERATURE (3).
Reading of about fifteen Greek plays. Origin and growth of the Greek theater and drama; Aristotle's *Poetics;* literary quality of the plays; religious, social, and political ideas of the fifth century B. C.
Fall. Mr. Allen.

109. GREEK AND ROMAN HISTORICAL LITERATURE (3).
The study in English translation of selections from Herodotus, Thucydides, Livy, Tacitus, and others, with consideration of their literary qualities and their reliability as historians.
Spring. Mr. Allen.

162. MODERN CONTINENTAL DRAMA (Dramatic Art 162) (3).
A study of representative plays of the modern period from Ibsen to Giraudoux.
Spring. Mr. Jurgensen.

163. LITERARY CRITICISM (3).
The principles which have animated classical, romantic, and realistic literature.
Fall. Mr. Bond.

170. THE MIDDLE AGES (3).
A survey of Medieval France, England, Germany, Spain, Italy, and Byzantium, from the viewpoints of civilization, art, and literature.
Spring. Mr. Linker.

175. RENAISSANCE AND BAROQUE (3).
The period from Dante to Calderon with special emphasis on Italian and Spanish contributions.
Fall. Mr. Friederich.

177. CLASSICISM AND PRE-ROMANTICISM (3).
The period from the French school of 1660 to the German *Sturm and Drang,* with special emphasis on French and English contributions.
Spring. Mr. Friederich.

185. INTRODUCTION TO FOLKLORE (3).
Definitions and examples of folklore in general and its various categories. Collection, classification, study, and analysis of folklore materials. Bibliography.
Fall. Mr. Hudson.

201. PROBLEMS AND METHODS IN COMPARATIVE LITERATURE (3).
The growth of comparative scholarship since 1800. Bibliography, Thematology, Influences, Parallelisms, *Zeitgeist,* and other modes of investigation.
Spring. Mr. Friederich.

DEPARTMENT OF DRAMATIC ART

Professors: SAMUEL SELDEN, R. B. SHARPE, EARL WYNN, H. E. DAVIS, J. W. PARKER
Associate Professors: KAI JURGENSEN, *R. F. SCHENKKAN, FOSTER FITZ-SIMONS
Assistant Professors: T. M. PATTERSON, J. S. CLAYTON, J. M. EHLE, JR., WESLEY WALLACE
Instructors: J. M. RILEY, R. E. SCROGGS
Lecturers: IRENE SMART RAINS, J. E. YOUNG
Assistants: JUNE M. ESCHWEILER, SUZANNE E. KRAMER, JOSEPH ROSENBERG, D. R. TREAT, MARJORIE E. WYLDE

The courses in the Department of Dramatic Art are designed to give the student a comprehensive knowledge of dramatic literature and intensive training in all phases of theatre work, from the writing of the play to the complete presentation before an audience.

Intensive study and research in all phases of dramatic art are made effective through introductory and advanced lecture courses, the seminar, and supervised practice work in theatre technique. The library resources for the student of dramatic literature and of the history of the theatre include a large and constantly increasing collection of critical and technical works and plays of all periods.

Practical training for the student of playwriting, acting, directing, and technical work is provided by the producing unit of the Department of Dramatic Art, The Carolina Playmakers. The Playmakers Theatre building, the Koch Memorial Forest Theatre, and the scene shop furnish ample opportunity for the student to test theory with practice, in both experimental and major performances. A description of the Playmakers' active program of work, both on and off the campus, will be found in Part V of this catalogue.

Admission to the Department of Dramatic Art presupposes the completion of the work of the General College in this institution or of equivalent work done elsewhere.

Requirements for a Major: A student choosing dramatic art as his major field should take a minimum of twenty full courses distributed as follows:

Seven to ten courses in dramatic art:
One course in Voice Training (40).
One course in Technical Laboratory (69).
One course in Shakespeare in the Theatre (150).

At least two courses in dramatic literature from: History of the Theatre (160), Continental Drama before Ibsen (161), Modern Continental Drama (162), British and American Drama of the Twentieth Century (164).

At least two courses in theatre arts from: 57, 58, 59, 61, 63, 64, 65, 66, 67, 76, 77, 78, 79, 87, 99, 155, 156, and 193.

Five to eight courses in allied departments of the Division of the Humanities, to be taken after conference with the departmental adviser.

Five to eight courses from other divisions.

* Absent on leave.

Students interested in reading and writing for Honors in dramatic art should consult the Chairman of the Department. Special attention is called to the opportunity for qualified students to undertake a program of original writing in association with students in English and Radio, Television and Motion Pictures, under the guidance of the University Committee on Writing.

Students who plan to take graduate work must include in their undergraduate program one course in playwriting and one in acting. Those who intend to take the advanced courses in Technical Direction (200) and Staging Methods (202) should see the prerequisites for those courses.

Courses for Undergraduates

30. THEATRE APPRECIATION (3). Sophomore elective open to juniors and seniors.

A survey of historical, literary, technical, and sociological aspects of the theatre by means of regular and illustrated lectures, demonstrations, classroom experiments, criticisms, and the reading of about ten representative modern plays.

Fall. Mr. Jurgensen and other members of the Dramatic Art staff.

40. VOICE TRAINING (3). Open to dramatic art and radio, television and motion pictures majors only.

A study of the fundamental principles underlying the effective use of voice and speech.

Two lecture and two laboratory hours a week, fall or spring. Fee for materials, $1.50. Mr. Wynn.

50. DIRECTED READINGS (3). Only for graduate transfer students needing to make up undergraduate deficiencies in the department.

Assigned readings in a selected field of dramatic literature.

Summer only. Mr. Parker.

57. THE DANCE (3). Open for credit to dramatic art majors and recreation majors in sociology only.

A study of the cultural development of the Dance and its relation to the other arts from the beginning to the present time, with practical training in fundamental techniques.

One lecture and four laboratory hours a week, fall or spring. Fee for materials, $3.00. Mr. Fitz-Simons.

58. INTRODUCTION TO RADIO AND TELEVISION, PART I (RTVMP 58) (3).

Basically a two-semester course, Introduction to Radio and Television is designed to provide a broad survey of the historical, social, cultural, and economic aspects of broadcasting. The first semester deals specifically with definitions of broadcasting, discussions of the importance of radio and television in American society, historical development of the forms of broadcasting, the organization and classification of broadcasting stations and networks, the role of "public interest" in broadcasting, comparisons of the American broadcasting system with those used by other nations, and a survey of broadcasting career opportunities.

Fall and spring. Mr. Wallace.

59. INTRODUCTION TO RADIO AND TELEVISION, PART II (RTVMP 59) (3). Prerequisite, RTVMP 58.

A continuation of the survey of the historical, social, cultural, and economic aspects of broadcasting, with emphasis on the study of agencies and institutions most nearly identified with the economic aspects of surveys of audience characteristics and factors which influence program structures, considerations of relationships between broadcasters and advertisers, and a study of station programming policies, planning, and operation.

Fall and spring. Mr. Wallace.

61. ACTING (3). Registration is limited to twenty.

A study of fundamental principles and practice for the actor.

Fall. Fee for materials, $2.00. Mr. Fitz-Simons.

63. PLAY DIRECTION (3). Prerequisite, Dramatic Art 61.

Registration is limited. Before registering for this course, students must secure the permission of the instructor. Students training for teaching who wish to take this course to complete a minor program in dramatic art should consult their advisers. (A student cannot receive degree credit for both this course and Dramatic Art 193.)

The theory and practice of play directing.

Spring. Fee for materials, $2.00. Mr. Fitz-Simons.

*64. SCENERY CONSTRUCTION AND PAINTING (3).

Elementary theory and practice in the construction and painting of scenery for the stage.

Two lecture and two laboratory hours a week, fall. Fee for materials, $2.00. Mr. Davis.

*65. STAGE LIGHTING (3).

Elementary theory and practice in stage lighting, including the choice of equipment and its control in the theatre.

Two lecture and two laboratory hours a week, spring. Fee for materials, $2.00. Mr. Davis.

*66. STAGE DESIGN (3). Prerequisite, Dramatic Art 64.

The history of, and elementary theory and practice in, the designing of scenery for the stage, through the preliminary sketch, the model, and the working drawings.

Spring. Fee for materials, $2.00. Mr. Riley.

*67. COSTUMING (3).

The designing and making of stage costumes with some consideration of make-up.

One lecture and four laboratory hours a week, spring. Fee for materials, $2.00. Mrs. Rains.

*69. TECHNICAL LABORATORY (3).

Required of all majors in the Department of Dramatic Art, and limited to them.

Practical technical work on the stage and in the scene and costume shops.

One lecture and four laboratory hours a week, fall or spring. Messrs. Davis, Riley, Mrs. Rains.

76. RADIO PRODUCTION ARTS (RTVMP 76) (4).

A study of the principles and methods of radio production and direction.

Two lecture and four laboratory hours a week, fall and spring. Fee for materials, $5.00. Messrs. Clayton, Young.

* Those enrolled will be expected to assist with the technical work in the productions of The Carolina Playmakers.

77. TELEVISION PRODUCTION ARTS (RTVMP 77) (4).
A study of the principles and methods of television production and direction.
Two lecture and four laboratory hours a week, fall and spring. Fee for materials, $5.00. Messrs. Clayton, Young.

78. WRITING FOR RADIO, TELEVISION, AND MOTION PICTURES, PART I (RTVMP 78) (3).
A basic course dealing chiefly with drama in which the student writes two dramatic scripts, does routine continuity for radio and television, and completes a special writing project which he selects in consultation with the instructor.
Fall and spring. Messrs. Ehle, Clayton.

79. WRITING FOR RADIO, TELEVISION, AND MOTION PICTURES, PART II (RTVMP 79) (3). Prerequisite, RTVMP 78.
A continuation of RTVMP 78.
Fall and spring. Messrs. Ehle, Clayton.

87. MOTION PICTURE PRODUCTION ARTS (RTVMP 87) (4).
Permission of the instructor must be secured. Physics 45, PHOTOGRAPHY, is highly recommended as a prerequisite for this course.
A study of the principles and methods of motion picture production and direction.
Two lecture and four laboratory hours a week, spring. Fee for materials, $5.00. Messrs. Scroggs, Wynn.

99. COURSE FOR HONORS (3). See note on Honors in the introduction to this departmental section, and "Program for Honors Work" in the Division of the Humanities.
Readings and the preparation of a piece of critical or original writing under the direction of departmental advisers.

Courses for Graduates and Advanced Undergraduates

150. SHAKESPEARE IN THE THEATRE (3).
A study of the literary and stage history of about twelve representative plays.
Fall. Mr. Jurgensen.

155. PLAYWRITING AND EXPERIMENTAL PRODUCTION I (3).
A practical course in playwriting and the experimental production of stage plays.
Fall. Fee for experimental production, $3.00. Messrs. Patterson, Selden, Parker, Jurgensen.

156. PLAYWRITING AND EXPERIMENTAL PRODUCTION II (3).
The principles of dramatic construction and practice in the writing and production of one-act plays.
Spring. Fee for experimental production, $3.00. Mr. Patterson.

160. HISTORY OF THE THEATRE (3).
A study of the development of the theatre, its place in the history of civilization and its changing relations to social conditions.
Spring. Mr. Jurgensen.

161. CONTINENTAL DRAMA BEFORE IBSEN (3).
A general survey of the drama and the theatre from Aeschylus to Goethe.
Fall. Mr. Jurgensen.

162. MODERN CONTINENTAL DRAMA (Comparative Literature 162) (3).
A study of representative plays of the modern period from Ibsen to Giraudoux.
Spring. Mr. Jurgensen.

164. BRITISH AND AMERICAN DRAMA OF THE TWENTIETH CENTURY (English 164) (3).
A survey of dramatic movements and writers from 1900 to the present.
Fall. Mr. Sharpe.

193. TEACHING DRAMATIC ART (3).
An intensive study of the theory and practice of play production and the organization of dramatic programs and courses, for high school teachers. (A student who has already taken Dramatic Art 63 cannot receive degree credit for this course.)
Spring. Fee for materials, $2.00. Mr. Parker.

Courses for Graduates

200. TECHNICAL DIRECTION (3). Prerequisites, Dramatic Art 64, 65, and 69, or equivalent training in technical practice.
Problems of the technical director in coordinating the engineering and mechanical aspects of production and theatre architecture.
Fall. Fee for materials, $2.00. Mr. Davis.

201. PLAY DIRECTING, ADVANCED (3). Prerequisites, Dramatic Art 61 and 63, or equivalent training in acting and directing.
Theory and practice in the training of actors and in directing.
Spring. Fee for materials, $3.00. Mr. Selden.

202. STAGING METHODS (3). Prerequisites, Dramatic Art 200 and a course in freehand drawing or equivalent experience.
The historical development of staging methods in the theatre; theory and practice in modern scenery and lighting design.
Spring. Fee for materials, $2.00. Mr. Davis.

203. TECHNICAL PROBLEMS IN PLAYWRITING (3). Prerequisite, Dramatic Art 155 or 156.
An advanced course in the principles of writing the full-length play. A study of the organization of materials, the development of the scenario, and the preparation of the completed script.
Fall and spring. Mr. Patterson.

210. THEATRE ADMINISTRATION (3). Open to selected dramatic art majors only.
A study of practical problems of organization, management, and promotion, especially in the regional theatres.
Spring. Mr. Parker.

299. THEATRE WORKSHOP (2 to 8 hours course credit, not towards a degree).
Open to a limited number of qualified students who have already secured a bachelor's or master's degree. Before registering for this course, students must have the special permission of the head of the department.
Advanced training in one field of specialization.
The staff of The Carolina Playmakers.

325. SEMINAR IN MODERN DRAMA (English 325) (3).
Research in dramatic literature, theatrical history, and staging methods.
Fall. Messrs. Sharpe, Selden.

340. SPECIAL READINGS (3).
Research in a special field of modern drama or the history of the theatre. This course may not be repeated for credit. Mr. Selden.

ECONOMICS

(See Business Administration and Economics)

SCHOOL OF EDUCATION

Professors: ARNOLD PERRY, G. B. PHILLIPS, W. C. RYAN, A. M. JORDAN, O. K. CORNWELL, A. K. KING, W. E. ROSENSTENGEL, J. M. GWYNN, W. J. MCKEE, W. H. PLEMMONS, R. E. JAMERSON, G. E. SHEPARD, THELMA GWINN THURSTONE, CARL F. BROWN

Associate Professors: W. H. PEACOCK, W. D. PERRY, RUTH WHITE FINK, GORDON ELLIS, C. E. MULLIS, H. C. HOUSE, RICHARD L. BEARD, *S. M. HOLTON, E. M. ALLEN, W. W. RABB

Assistant Professors: RUTH PRICE, †WILLIAM P. ANDERSON, L. R. CASEY, J. T. HUNT, J. R. SKRETTING, DONALD TARBET, STACY EBERT, SAMUEL GILL BARNES, W. M. JENKINS

Instructors: MARY FRANCES KELLAM, MARY TURNER LANE, WILLIAM T. MEADE, M. Z. RONMAN, HAMMOND STRAYHORN, CARL BLYTH

Part-time Instructors: FRANCES B. HOGAN, MARILYN CRAWFORD

Graduate Assistants: EARL EDWARD HOFFMAN, SAMUEL GEEK, JACK STONER LOWDER, CHARLES ISAAC ECKER, RAYMOND EDWIN BAUER, FRANK ARWOOD

Teaching Fellow: WILLARD SWIERS

General Information

Students who plan to meet the requirements for a teaching certificate in Elementary Education or Secondary Education are under the joint direction of the School of Education and the respective subject matter departments.

Students interested in preparing to teach should consult the Dean of the School of Education, who will give information about the requirements in various teaching fields. Students are admitted to the School of Education for professional work at the beginning of the junior year.

The professional work in preparation for teaching must be taken over a two-year period. For that reason juniors should begin their work promptly in order to meet the requirements.

Courses for Undergraduates

NOTE: For undergraduate courses in physical education see the Department of Physical Education.

41. INTRODUCTION TO THE STUDY OF EDUCATION I (3). *(The School, The Pupil,* and *Teaching).* This course or its equivalent is required of all prospective teachers.

This is an orientation course designed to help develop an understanding of the philosophy and procedures of public education.

Fall and spring. Messrs. Phillips, Plemmons, Holton, Tarbet, Skretting, Jenkins.

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* Absent on leave, 1954-1955.
† Resigned June 1, 1954

42. INTRODUCTION TO THE STUDY OF EDUCATION II (3).
(Not offered in 1953-1954.) Mr. Plemmons.

61 (*Each semester*); 63 (*Each*); 75 (*Fall*); 76 (*Fall*); 77 (*Spring*); 81 (*Each*); 83f (*Spring*); 83s (*Spring*); 85 (*Each*); 87 (*Spring*); 89 (*Spring*); 91 (*Spring*). METHODS AND MATERIALS IN TEACHING IN: ELEMENTARY GRADES, HEALTH AND PHYSICAL EDUCATION, INSTRUMENTAL MUSIC, CHORAL MUSIC, ART, ENGLISH, FRENCH, SPANISH, SOCIAL STUDIES, LATIN, MATHEMATICS, SCIENCE (3). *(Teaching).*

Emphasis is placed upon the teacher's function in classroom learning situations and in the operation of the public school. The course is concerned with the study of problems common to all teachers, as well as those peculiar to teaching in the subject areas.

These courses are taught six days per week during first half of semester indicated. They yield course or hour credit only for the degrees granted by the School of Education.

62 (*Each semester*); 64 (*Each*); 78 (*Fall*); 79 (*Fall*); 80 (*Spring*); 82 (*Each*); 84f (*Spring*); 84s (*Spring*); 86 (*Each*); 88 (*Spring*); 90 (*Spring*); 92 (*Spring*). STUDENT TEACHING IN: ELEMENTARY GRADES, HEALTH AND PHYSICAL EDUCATION, INSTRUMENTAL MUSIC, CHORAL MUSIC, ART, ENGLISH, FRENCH, SPANISH, SOCIAL STUDIES, LATIN, MATHEMATICS, SCIENCE (9). *(School, Pupil, Teaching).*

Student teaching is conducted on a full-time basis during the second half of semester which enables the student to participate in all aspects of public school life. It is designed to emphasize learnings in the three areas of *The School, The Pupil,* and *Teaching,* as outlined in the plan of the professional courses. Student teaching is carried out under University supervision in cooperating public schools in the state.

These courses yield course or hour credit only for the degrees granted by the School of Education.

Laboratory fee, $20.00.

71a. CHILD GROWTH AND DEVELOPMENT (3). *(The Pupil).* Required of all prospective teachers.

A course combining the most significant aspects of general and educational psychology as they relate to the educational process. Functional understanding of individual differences, growth, personality, and factors influencing learning is stressed.

Fall and spring. Fee, $2.00. Messrs. Hunt, Beard, Jordan, Mrs. Thurstone.

71b. CHILD GROWTH AND DEVELOPMENT (3). *(The Pupil).* Required of all prospective teachers.

A continuation of Education 71a stressing the facts and principles of human development and behavior. Prospective elementary school teachers will be in sections devoted to the psychological development of the child of elementary school age. Those working for the secondary school certificate will be in sections devoted to the adolescent.

This course meets six days a week during the first half of the semester in which student teaching is done.

Fall and spring. Messrs. Hunt, Beard, Mrs. Ebert.

73. STATISTICAL METHODS IN EDUCATION (3).
(Not offered in 1954-1955.) Staff.

74. THE ELEMENTARY SCHOOL (3). *(The School).*
This course meets six days each week during the first half of the semester in which student teaching is done.
This course is designed to give the student an understanding of the purposes and organization of the elementary school. The work of the school is studied in relation to the various community agencies concerned with the education of the child.
Fall and spring. Mr. Brown, Mrs. Ebert, Mrs. Lane.

*93. SURVEY AND EVALUATION OF BOOKS AND RELATED MATERIALS FOR CHILDREN (3).
Fall. Miss Kalp (of the School of Library Science).

95. SELECTION AND USE OF REFERENCE MATERIALS (3).
Fall. Miss Reed (of the School of Library Science).

99. THE SECONDARY SCHOOL (3). *(The School).*
This course meets six days each week during the first half of the semester in which student teaching is done.
A course designed to assist the prospective teacher in developing an understanding of the functions and organization of the American secondary school. Examination is made of the relationship between the school and each of the other social institutions concerned with the education of the adolescent. Actual and projected school practices are evaluated. Open to School of Education students only.
Fall and spring. Messrs. Gwynn, Holton, Skretting, Tarbet.

Courses for Graduates and Advanced Undergraduates

Undergraduate students who are not in the School of Education must get the permission of the dean to enroll in these courses.
Attention is called to courses listed under psychology, sociology, physical education, dramatic art, and other departments as of particular importance in present-day preparation of teachers and educational administrators. For advanced courses in physical education see the Department of Physical Education.
For graduate courses for teachers and school administrators offered on Saturday at Chapel Hill see separate announcements.

NOTE: Most of the graduate courses in education are also available in one or both of the two terms of the summer session. See the catalogue of the summer session.

101. EDUCATIONAL ADMINISTRATION (3).
Fall and spring. Messrs. Phillips, Rosentengel.

102. ELEMENTARY SCHOOL ORGANIZATION AND ADMINISTRATION (3).
(Not offered in 1954-1955.) Messrs. Phillips, A. Perry, Plemmons.

105. GUIDANCE IN THE SCHOOL (3).
Fall. Messrs Beard, W. D. Perry, Ellis, Tarbet, Mrs. Thurstone.

110. PHILOSOPHY OF MODERN EDUCATION (3).
Fall. Messrs. Ryan, Plemmons.

111. ORGANIZATION AND ADMINISTRATION OF INDUSTRIAL ARTS IN THE MODERN SCHOOL (3).
(Not offered in 1954-1955.)

* A special course for elementary school teachers.

120. PRINCIPLES OF PHYSICAL EDUCATION (2). See Physical Education 120.

121. ADMINISTRATION OF PHYSICAL EDUCATION (3). See Physical Education 121.

122. THE SELECTION OF BOOKS AND RELATED MATERIALS FOR YOUNG PEOPLE (3). See Library Science 122.

123. THE SELECTION OF BOOKS AND RELATED MATERIALS FOR CHILDREN (3). See Library Science 123.

130. PRINCIPLES AND METHODS IN ADULT EDUCATION (2).
(Not offered in 1954-1955.)

131. ADULT EDUCATION: A GENERAL SURVEY (2).
(Not offered in 1954-1955.)

135. AUDIO-VISUAL INSTRUCTION: TECHNIQUES AND MATERIALS (3).
Fall. Materials fee, $2.00. Mr. Milner.

142. EUROPEAN FOUNDATIONS OF MODERN EDUCATION (3).
Spring. Mr. King.

143. SOCIAL AND EDUCATIONAL HISTORY OF THE UNITED STATES (History 170) (3).
Fall. Messrs. King, Holton.

144. COMMUNITY EDUCATION (3).
Spring. Messrs. Perry, Ryan.

146. CONTEMPORARY ISSUES AND TRENDS IN EDUCATION (3).
Spring. Messrs. King, Ryan.

147. HIGHER EDUCATION IN THE UNITED STATES (3). Prerequisite, Education 142 or Education 143, or equivalent.
(Not offered in 1954-1955.)

152. THE LANGUAGE ARTS IN THE ELEMENTARY SCHOOL (3).
Fall and spring. Mr. Brown, Mrs. Ebert.

154. THE SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3).
(Not offered in 1954-1955.)

155. NATURAL SCIENCE IN THE ELEMENTARY SCHOOL (3).
Spring. Messrs A. Perry, Brown.

156. ARITHMETIC IN THE ELEMENTARY SCHOOL (3).
Spring. Messrs. Brown, A. Perry, Mrs. Ebert.

160. CURRICULUM CONSTRUCTION (3).
Open to seniors and graduate students with 15 semester hours of credit in education.
Fall and spring. Messrs. Gwynn, Tarbet.

161. PROGRESSIVE PRACTICES IN THE MODERN SCHOOL (3).
Fall and spring. Mr. Brown, Mrs. Thurstone, Mrs. Ebert.

165. CORRECTIVE READING (3). Prerequisite, Education 152.
Intensive study of the diagnosis, correction, and prevention of difficulties in silent and oral reading. This course deals with both elementary and secondary school reading problems. The principles and practices are applied in work with children who are receiving help in the Reading Clinic.
Spring. Messrs Brown, Hunt.

171. GROWTH AND DEVELOPMENT OF THE SCHOOL CHILD (3). Child and adolescent development.
Fall and spring. Messrs. Jordan, Hunt, Beard, Mrs. Thurstone.

172. THE PROBLEMS OF MALADJUSTMENT AMONG CHILDREN (3).
Spring. Messrs. Jordan, W. D. Perry.

174. USE AND INTERPRETATION OF EDUCATIONAL TESTS AND MEASUREMENTS (3).
Fall. Messrs. Jordan, Hunt.

175. EXTRACURRICULAR ACTIVITIES (3).
Fall. Messrs. Plemmons, Tarbet.

176. MENTAL HYGIENE IN TEACHING (3). Prerequisite, introductory courses in psychology and education.
Spring. Messrs. Ryan, Jordan.

177abc. SURVEY IN SPECIAL EDUCATION (3 or 6).
(Not offered in 1954-1955.)

178ab. THEORY AND PRACTICE IN EDUCATING THE SPEECH HANDICAPPED (2 or 4).
(Not offered in 1954-1955.)

196. THE JUNIOR HIGH SCHOOL (3).
Fall. Messrs. Gwynn, Plemmons.

197. SOCIAL POLICY AND EDUCATION (3).
Spring. Mr. King.

199. SECONDARY EDUCATION IN THE UNITED STATES (3).
Fall and spring. Messrs. King, Plemmons, Gwynn, Tarbet.

Courses for Graduates

201. PROCEDURES IN EDUCATIONAL RESEARCH (3).
Fall. Mr. King.

203. STATISTICAL METHODS IN EDUCATION (3). Prerequisite, Education 71.
Fall. Messrs. Jordan, Rosenstengel, Cornwell.

204. TECHNIQUES IN EDUCATIONAL LEADERSHIP (3).
Fall. Messrs. Phillips, Rosenstengel.

205. TECHNIQUES IN COUNSELING (3). Prerequisites, appropriate psychology courses in Education 105.
Fall. Messrs. W. D. Perry, Ellis.

206. THE INTERPRETATION AND USE OF EDUCATIONAL AND OCCUPATIONAL MATERIALS (3). Prerequisites, practical experience and at least two years of work in education and psychology.
Spring. Mr. W. D. Perry.

207. STUDENT PERSONNEL ADMINISTRATION (3). Prerequisites, appropriate psychology courses and Education 205.
Fall. Messrs. W. D. Perry, Ellis.

208. STATE AND COUNTY SCHOOL ORGANIZATION (3). Prerequisite, Education 101 or its equivalent.
(Not offered in 1954-1955.)

209. BUSINESS MANAGEMENT AND SCHOOL FINANCE (3). Prerequisite, Education 101 or its equivalent.
Spring. Messrs. Phillips, Rosenstengel.

210. MANAGEMENT OF SCHOOL PLANT AND EQUIPMENT (3). Prerequisite, Education 101 or its equivalent.
Spring. Mr. Rosenstengel.

211. SUPERVISED PRACTICUM IN GUIDANCE (3). Prerequisites, Education 105, 205, 274, or permission of instructor.
Spring. Messrs. W. D. Perry, Ellis.

224. (See under Department of Physical Education).

225. (See under Department of Physical Education).

245. COMPARATIVE EDUCATION (3).
Spring. Mr. Ryan.

265. INVESTIGATIONS IN READING (2).
(Not offered in 1954-1955.)

267ab. EDUCATION WORKSHOP (3 or 6).
Open by special permission to a limited number of qualified graduate students who have specific interests or problems that are adapted to staff and local resources available.
(Not offered in 1954-1955.) Graduate staff and visiting faculty.

271. PROBLEMS IN EDUCATIONAL PSYCHOLOGY I (3).
Individual differences and problems of conduct.
Fall. Mr. Jordan.

272. PROBLEMS IN EDUCATIONAL PSYCHOLOGY II (3). Prerequisite, one and preferably two courses in educational and developmental psychology.
Psychology of learning (theoretical aspects) and psychology of learning (practical applications).
Spring. Mr. Jordan.

273. MENTAL MEASUREMENTS (3). Prerequisite, one course in educational psychology or a course in general psychology.
Spring. Messrs. Jordan, Ellis.

274. TECHNIQUES IN THE ANALYSIS OF THE INDIVIDUAL (3). Prerequisite, Education 105.
The individual inventory and the use of tests in the analysis of the individual.
Fall. Messrs. Ellis, W. D. Perry.

275. ADMINISTRATIVE ASPECTS OF THE GUIDANCE PROGRAM (3). Prerequisite, Education 105.
Spring. Messrs. Ellis, W. D. Perry.

277. ADVANCED THEORY AND PRACTICE IN EDUCATING THE SPEECH HANDICAPPED (3).
Organic and functional.
(Not offered in 1954-1955.)

285. INVESTIGATIONS AND TRENDS IN TEACHING THE SOCIAL STUDIES (3).
(Not offered in 1954-1955.)

291. INVESTIGATIONS AND TRENDS IN TEACHING NATURAL SCIENCE (3).
(Not offered in 1954-1955.)

296. SCHOOL ORGANIZATION AND ADMINISTRATION (The Elementary and Secondary Principalship) (4).
Fall and spring. Messrs. Gwynn, Plemmons, A. Perry.

298. SUPERVISION OF INSTRUCTION (3).
Spring. Messrs A. Perry, Gwynn, Phillips.

303. PROBLEMS IN EDUCATIONAL ADMINISTRATION (2 or 4). Prerequisites, Education 101 or its equivalent and one other course in educational administration.
Fall and spring. Messrs. Phillips, Rosenstengel, Plemmons.

304. PROBLEMS IN EDUCATIONAL MEASUREMENT (2 or 4). Prerequisite, Education 174.
Fall and spring. Mr. Jordan.

305. PROBLEMS IN GUIDANCE AND PERSONNEL WORK (2 or 4). Prerequisite, two graduate courses in guidance.
Fall and spring. Messrs. Ellis and W. D. Perry.

341. FOUNDATIONS OF MODERN EDUCATION (2 or 4). Prerequisites, Education 142 and 143, or equivalent.
(Not offered in 1954-1955.)

350. PROBLEMS IN ELEMENTARY EDUCATION (2 or 4). Prerequisites, two courses in graduate education.
Fall and spring. Messrs. A. Perry, Brown.

360. PROBLEMS IN THE CURRICULUM (2 or 4). Prerequisites, two courses in graduate education.
Fall and spring. Mr. Gwynn.

375. THESIS COURSE (Maximum with thesis 3).
Fall and spring. Members of the graduate faculty.

376. SEMINAR IN EDUCATION (3). Prerequisites, two courses in graduate education.
Fall and spring. Members of the graduate faculty.

398. PROBLEMS IN SECONDARY EDUCATION (2 or 4). Prerequisites, two courses in graduate secondary education.
Fall and spring. Messrs. Gwynn, Plemmons.

DEPARTMENT OF ENGLISH

Professor: *DOUGALD MACMILLAN, †G. C. TAYLOR, †G. R. COFFMAN, A. P. HUDSON, A. C. HOWELL, R. P. BOND, RAYMOND ADAMS, W. A. OLSEN, H. K. RUSSELL, SAMUEL SELDEN, WILLIAM WELLS, R. B. SHARPE, C. P. LYONS, N. E. ELIASON, EARL WYNN, E. W. TALBERT, FLOYD STOVALL, ‡R. A. PRATT, J. O. BAILEY, N. W. MATTI
Associate Professors: E. H. HARTSELL, G. F. HORNER, L. A. COTTEN, C. H. HOLMAN

* Absent on leave, 1954-1955.
† Kenan Professor Emeritus.
‡ Absent on leave, spring 1955, and fall 1955.

Assistant Professors: MACON CHEEK, G. M. HARPER, J. R. GASKIN, ROBERT VOITLE, P. G. PHIALAS
Lecturers: JESSIE REHDER, SAMUEL BARNES
Visiting Poet: ROBERT FROST
Instructors: W. J. BARNHART, LEE H. POTTER, LAMARR STEPHENS
Part-time Instructors: P. R. BAUMGARTNER, VELMA E. BOURGEOIS, R. J. CALHOUN, T. E. CRAWLEY, LOUISA DULS, R. W. GOLDSMITH, W. F. GOODYKOONTZ, G. C. HERNDL, PATRICIA A. HOSTETTER, THEODORE HUGUELET, KERMIT HUNTER, N. E. JARRARD, JOHN F. MAHONEY, ROY C. MOOSE, W. E. MORRIS, E. R. OETTINGER, DAVID ORR, ALISON PREBLE, ROSAMOND PUTZEL, R. P. ROGERS, J. B. SCHOLES, E. E. STEVENS, W. G. THOMPSON, F. C. THOMSON, J. C. WESTON. THOMAS WHEELER, W. H. WIATT
Teaching Fellows: J. H. CRABTREE, M. Y. JACOBS, F. E. KEARNS
Research Assistants: SHIRLEY G. COCHRANE, MARY P. SANFORD
Graduate Assistant: ROBERT E. SHARKEY

Courses for Undergraduates

Prerequisites: English 1 and 2 are prerequisite to all advanced courses offered by the English department. Juniors will not be admitted to courses for advanced undergraduates except by permission.

Majors in English in the College of Arts and Sciences: A student choosing English as his major field should take (a) English 50; (b) one of the following: English 87, 91, 93, 94, 95, 163; (c) one of the following: English 70, 75; (d) one of the following: English 79, 81, 82, 83, 84, 88, 89, 111, 121; (e) four courses chosen as free electives from the advanced courses offered by the department (courses numbered from 40 to 199, with the exception of 51 and 59). In accordance with University regulations a student must have a grade of C or better in at least eighteen semester hours in the major.

Majors in English in the School of Education: A student who desires to secure a certificate in the public high schools with a major in English should consult the School of Education for the courses in education and for the minor. The English requirements are: (a) English 50; (b) English 96; (c) English 81 or 82; (d) one of the following: English 40, 41, 44; (e) one of the following: English 70, 75, 83, 91, 93; (f) one of the following: English 84, 88, 89, 94, 97, 98; (g) one elective in English. In accordance with University regulations a student must have a grade of C or better in at least eighteen semester hours in the major.

Minors in English in the School of Education: Students who choose a minor program in English will take: (a) English 50; (b) English 96; (c) English 81 or 82; (d) one of the following: English 83, 84, 88, 89, or by permission an elective in English provided the student has had English literature in the General College.

R. ENGLISH COMPOSITION: REMEDIAL.

Required of all students who by placement test fail to qualify for English 1.

To students completing the course with grades of A or B, credit for English 1 will be allowed.

Fall and spring. Mr. Horner, *Director,* and staff.

1. ENGLISH COMPOSITION AND RHETORIC (3).
Required of all students except those qualifying by placement test for English 2.
Fall and spring. Mr. Horner, *Director,* and staff.

2. ENGLISH COMPOSITION AND RHETORIC (3).
Required of all students.
Fall and spring. Mr. Horner, *Director,* and staff.

21. ENGLISH LITERATURE (3). Prerequisite, English 2.
Substantial readings in Chaucer, Shakespeare, and Milton. Required of all students in the General College.
Fall and spring. Mr. Horner, *Director,* and staff.

31. ENGLISH LITERATURE (3). Sophomore elective. Prerequisite, English 2.
Substantial readings in Swift, Wordsworth, Browning, and Shaw.
Spring. Mr. Horner, *Director,* and staff.

32. ENGLISH AND AMERICAN FICTION (3). Sophomore elective. Prerequisite, English 2.
Readings in selected novels and short stories.
Fall and spring. Mr. Horner, *Director,* and staff.

33. ENGLISH AND AMERICAN LITERATURE (3). Sophomore elective. Prerequisite, English 2.
Selected readings in contemporary British and American literature.
Spring. Mr. Horner, *Director,* and staff.

40. VOICE AND DICTION (3).
Designed to establish good habits of speech by study of principles and analysis of the individual's voice, articulation, and pronunciation. Lectures, discussions, recordings, drill sessions, and conferences.
Fall and spring. Laboratory fee, $1.50. Mr. Mattis.

41. ORAL INTERPRETATION OF LITERATURE (3).
Emphasis on understanding and appreciation as preparation for oral reading. Vocal and articulatory weaknesses receive attention, but systematic training in the mechanics of speech is reserved for English 40.
Fall. Laboratory fee, $1.50. Mr. Mattis.

44. PUBLIC SPEAKING (3).
Composition and delivery of original speeches. Analysis of content, style, adaptation to the audience, and delivery. Recordings and conferences.
Fall and spring. Laboratory fee, $1.50. Mr. Olson, Mr. Mattis.

50. SHAKESPEARE (3).
Study of about twenty representative comedies, histories, and tragedies.
Fall, Mr. Lyons, Mr. Phialas; *spring,* Mr. Sharpe, Mr. Wells.

51. ADVANCED COMPOSITION: PRACTICAL EXPOSITION (3).
Primarily for business administration and pharmacy students. Business forms letters, reports, professional papers, and articles for the press. This course cannot be counted toward an English major.
Fall, Mr. Hartsell; *spring,* Mr. Voitle.

52. ADVANCED COMPOSITION: THE TECHNIQUE OF EXPOSITION (3) Prerequisite, permission of the instructor.
Expository writing for students desiring practice in the organization of material
Spring. Mr. Bailey.

53. CREATIVE WRITING I: INTRODUCTION TO THE SHORT STORY (3). Prerequisite, permission of the instructor.

Class discussion of short stories, of longer fiction, and of general literary principles; technical training in the writing of original short stories.

Fall. Miss Rehder.

54. CREATIVE WRITING II (3). Prerequisite, permission of the instructor.

An advanced course in imaginative writing for students who have had some previous experience in this field.

Spring. Miss Rehder.

55. ADVANCED VOICE AND DICTION (3). Prerequisite, English 40 or permission of the instructor.

A continuation of English 40, with close adaptation to the individual's needs. Further study of phonetics. Practice in oral reading, public speaking, and dramatic interpretation. Recordings, drills, and conferences.

Spring. Laboratory fee, $1.50. Mr. Mattis.

56. ADVANCED PUBLIC SPEAKING (3). Prerequisite, English 40, or 44, or permission of the instructor.

A continuation of English 44. Composition and delivery of original speeches, with stress on persuasion. Study of model speeches. Techniques of public discussion. Individual analyses, recordings, conferences.

Spring. Laboratory fee, $1.50. Mr. Olsen.

59. SCIENTIFIC WRITING (3). Prerequisite, permission of the instructor.

To meet the needs of students in the sciences, through practice in writing explanations, descriptions, business letters, professional papers, and reports. This course cannot be counted toward an English major.

Fall, Mr. Howell; *spring,* Mr. Harper.

70. CHAUCER (3).

The development of Chaucer as a man and as an artist as revealed in certain minor poems, the *Troilus,* and most of *The Canterbury Tales.*

Fall. Mr. Pratt.

72-73. COURSE FOR HONORS (6). See the Program for Honors Work in the Division of the Humanities.

Readings and the preparation of an essay under the direction of departmental advisers.

75. MILTON (3).

The works of Milton studied in the light of the life, times, and culture of the poet.

Fall, Mr. Wells; *spring,* Mr. Cheek.

79. ENGLISH LITERATURE, 1890-1920 (3).

Hardy, Henley, Housman, Kipling, Wilde, Shaw, Conrad, Galsworthy, and the Irish Revival.

Spring. Mr. Cotten.

81. AMERICAN LITERATURE (3).

Major authors from the beginning to 1855.

Fall, Mr. Adams, Mr. Holman; *spring,* Mr. Horner.

82. AMERICAN LITERATURE (3).

Major authors from 1855 to the present.

Fall, Mr. Stovall; *spring,* Mr. Stovall, or Mr. Holman.

83. PROSE AND POETRY OF THE CLASSICAL PERIOD (3).

Addison, Steele, Swift, Pope, Johnson, Boswell, Gray, Cowper.

Spring. Mr. Bond.

84. THE CHIEF ROMANTIC POETS (3).
Wordsworth, Coleridge, Byron, Shelley, and Keats.
Fall, Mr. Hudson; *spring,* Mr. Hartsell.

87. THE LITERARY ASPECTS OF THE BIBLE (3).
The Old Testament and the New Testament will be taken up in alternate years—New Testament, 1954; Old Testament, 1955.
Spring. Mr. Howell.

88. VICTORIAN LITERATURE I, 1832-1860 (3).
Carlisle, Tennyson, Browning, Macaulay, Mill, and the novelists.
Fall. Mr. Cotten.

89. VICTORIAN LITERATURE II, 1860-1890 (3).
Ruskin, Arnold, Rossetti, Morris, Swinburne, George Eliot, and Meredith.
Spring. Mr. Bailey.

91. THE ENGLISH NOVEL (3).
The English novel in the eighteenth and nineteenth centuries.
Fall, Mr. Holman; *spring,* Mr. Russell.

93. THE ENGLISH DRAMA (3).
The English drama from the beginnings to 1900.
Fall. Mr. Cheek.

94. PRINCIPLES OF LITERARY ART (3).
A study of the theories of literature through their application to specific English masterpieces.
Fall. Mr. Lyons.

95. THE ENGLISH LANGUAGE (3).
Present-day English, British and American, standard and dialectal—its historical background and development. The language as a whole is considered, i.e. vocabulary, pronunciation, spelling, etc., and grammar is treated only incidentally.
Spring. Mr. Gaskin.

96. ENGLISH GRAMMAR (3).
A study of modern English grammar with special attention to such current problems as the confusion in grammatical terminology, attacks on traditional rules, conflict between prescriptive and descriptive grammar. The course is designed especially for prospective English teachers, but others may take it.
Fall, Mr. Gaskin; *spring,* Mr. Eliason.

97. RECENT BRITISH AND AMERICAN PROSE (3).
A study of the novel and short story, since 1920.
Fall, Mr. Russell; *spring,* Mr. Holman.

98. RECENT BRITISH AND AMERICAN POETRY (3).
A study of the poetry written in English since 1920.
Fall. Mr. Cotten.

Courses for Graduates and Advanced Undergraduates

NOTE: Except by permission juniors will not be admitted to these courses.

101. OLD ENGLISH GRAMMAR AND READINGS (3).
Primarily a linquistic course in Old English grammar, but time is devoted to surveying the prose of the period.
Fall. Mr. Eliason.

111. ENGLISH LITERATURE OF THE RENAISSANCE (3).
A survey of the literature of the Elizabethan period, exclusive of the drama.
Spring. Mr. Wells.

113. ENGLISH DRAMA TO 1600 (3).
English drama in the sixteenth century, with preliminary consideration of the medieval religious drama.
Fall. Mr. Talbert.

114. ENGLISH DRAMA, 1600-1642 (3).
Jacobean and Caroline drama, with emphasis on Jonson, Chapman, Webster, Beaumont, Fletcher, Massinger, and Ford.
Spring. Mr. Sharpe.

121. ENGLISH LITERATURE, 1616-1700 (3).
The non-dramatic literature of the period.
Fall. Mr. Howell.

133. RESTORATION AND EIGHTEENTH-CENTURY DRAMA (3).
A study of the drama from 1660 to 1780.
Spring. Mr. Voitle.

148. NINETEENTH-CENTURY DRAMA, ENGLISH AND AMERICAN (3).
A survey of dramatic movements and writers from 1800 to 1900.
Spring. Mr. Bailey.

153. SOUTHERN AMERICAN LITERATURE (3).
The three centuries from John Smith to Ellen Glasgow, treating major trends and authors.
Spring. Mr. Holman.

155. THE AMERICAN NOVEL (3).
The American novel from its beginning to the twentieth century.
Spring. Mr. Stovall.

163. LITERARY CRITICISM (3).
The principles which have animated classical, romantic, and realistic literature.
Fall. Mr. Bond.

164. BRITISH AND AMERICAN DRAMA OF THE TWENTIETH CENTURY (Dramatic Art 164) (3).
A survey of dramatic movements and writers from 1900 to the present.
Fall. Mr. Sharpe.

167. THE ENGLISH BALLAD (3).
English and Scottish popular ballads and their survivals in America, particularly in North Carolina.
Spring. Mr. Hudson.

170. MODERN ENGLISH (3).
A study of modern English grammar and problems in teaching it.
Fall. Mr. Eliason.

Courses for Graduates

201. STUDIES IN OLD ENGLISH LITERATURE: BEOWULF (3). Prerequisite, English 101.
A continuation of English 101, but with literary rather than linguistic emphasis. The whole body of Old English poetry is dealt with, *Beowulf* receiving special attention.
Spring. Mr. Eliason.

202. MIDDLE ENGLISH LITERATURE (3).
The literature of the period in relation to its social, political, and religious background.
Fall. Mr. Pratt.

204. HISTORY OF THE ENGLISH LANGUAGE (3). Prerequisite, English 101 or permission of the instructor.
For students of linguistics and English literature; an intensive study of the language mainly from the historical point of view, but other approaches are considered.
Spring. Mr. Eliason.

208. CHAUCER (3).
A reading of Chaucer's works with attention to critical and historical problems involved in their interpretation.
Fall. Mr. Pratt.

225. MILTON (3).
An intensive study of Milton's works and thoughts.
Spring. Mr. Wells.

226. ENGLISH LITERATURE, 1700-1780 (3).
The non-dramatic literature of the period.
Fall. Mr. Bond.

231. SHAKESPEARE: THE EARLY PLAYS (3).
Emphasis on historical and critical problems presented by Shakespeare's works.
Fall. Mr. Talbert.

232. SHAKESPEARE: THE LATE PLAYS (3).
Emphasis on historical and critical problems presented by Shakespeare's works.
Spring. Mr. Lyons.

241. ENGLISH LITERATURE, 1798-1832 (3).
A survey of the Romantic period, with special attention to the major poets.
Fall. Mr. Hudson.

243. VICTORIAN LITERATURE (3).
The major English writers, 1830-1900.
Fall. Mr. Cotten.

282. EARLY AMERICAN LITERATURE (3).
A survey of the colonial, revolutionary, and early national periods, including Bryant, Irving, and Cooper.
Fall. Mr. Horner.

283. AMERICAN LITERATURE, 1830-1855 (3). English 282 precedes this survey, but is not prerequisite.
Poe, Hawthorne, Emerson, Thoreau, Lowell, and Transcendentalism.
Spring. Mr. Adams.

284. AMERICAN LITERATURE, 1855-1900 (3).
Chief authors: Melville, Whitman, Lanier, Dickinson, Mark Twain, Howells, James; literary criticism; and the dominance of magazines.
Fall. Mr. Stovall.

297. INTERPRETATION OF LITERATURE (3.)
A study of theoretical and practical interpretations of selected examples of literature, with attention to the relations of recent criticism to traditional scholarship.
Spring. Mr. Lyons.

307. SEMINAR: STUDIES IN MEDIEVAL LITERATURE (3).
Research in special problems in the literature of the Middle Ages.
(Not offered 1954-1955.) *Spring.* Mr. Pratt.

310ab. SEMINAR: STUDIES IN ELIZABETHAN LITERATURE (3 or 6).
Fall, Mr. Wells; *spring,* Mr. Talbert.

312. SEMINAR: STUDIES IN SEVENTEENTH-CENTURY LITERATURE (3).
(Not offered 1954-1955.) *Spring.* Mr. Howell.

313. SEMINAR: STUDIES IN EIGHTEENTH-CENTURY LITERATURE (3 or 6).
Spring. Mr. Bond.

317. SEMINAR: STUDIES IN NINETEENTH-CENTURY ROMANTICISM IN ENGLAND (3).
Two divisions in alternate years: Byron and Shelley problems; Wordsworth and Coleridge problems.
Spring. Mr. Hudson.

318ab. SEMINAR: STUDIES IN AMERICAN LITERATURE (3 or 6).
Fall, Mr. Adams; *spring,* Mr. Stovall.

320ab. SEMINAR: STUDIES IN VICTORIAN LITERATURE (3 or 6).
Fall, Mr. Bailey; *spring,* Mr. Cotten.

325. SEMINAR: MODERN DRAMA (Dramatic Art 325) (3).
Fall. Messrs. Sharpe, Selden.

331. BIBLIOGRAPHY AND METHODOLOGY (3). Required of all candidates for the A.M. and Ph.D. degrees.
A course designed to aid students in preparing term papers, theses, and dissertations. Attention to bibliographical guides, problems of literary research, and standard scholarly forms and procedures.
Fall. Mr. Bond.

340. SPECIAL READINGS (3).

341. SPECIAL RESEARCH (3).

365. SEMINAR: THE ENGLISH NOVEL (3).
Fall. Mr. Russell.

Attention is called to the courses in philology and advanced literary study offered in the departments of Classics (Latin Epigraphy, Latin Paleography), Comparative Literature, Germanic Languages (Gothic, Old and Middle High German, Old Saxon, Old Norse, etc.), and Romance Languages (Old French, Provençal, Old Irish, Old Spanish, Dante, etc.).

See also the Curriculum in Comparative Linguistics.

CURRICULUM IN FOLKLORE

DEAN W. W. PIERSON, *Chairman*
Professors: A. P. HUDSON, *Secretary*, J. P. GILLIN, U. T. HOLMES, G. B. JOHNSON, J. E. KELLER, J. P. SCHINHAN, S. A. STOUDEMIRE

This curriculum assembles the facilities of the University for those who desire a major or minor for the master's degree or a doctoral minor in folklore with a major in some related department, and mobilizes the pertinent graduate instruction in this field now being offered in such departments as English, Germanic Languages, Music, Romance Languages, and Sociology and Anthropology. Students having had an undergraduate major in any of these departments, and having had the prerequisite courses, are eligible to take work in this curriculum with a view to becoming candidates for higher degrees.

Courses for Graduates and Advanced Undergraduates

(For descriptions of courses below offered by the departments of Music, Romance Languages, and Sociology and Anthropolgy, see listings under department headings.)

104. FOLK MUSIC (Music 104) (3).
Fall. Mr. Schinhan.

105. CELTIC: OLD IRISH (French 105) (3).
Spring. Mr. Holmes.

106. CELTIC: OLD WELSH (French 106) (3).
One semester. Mr. Holmes.

122. CULTURAL ANTHROPOLOGY (Anthropology 122) (3).
Fall. Materials fee, $1.00. Messrs. Gillin, Johnson.

123. PRIMITIVE RELIGIONS (Anthropology 123) (3).
(1954-1955 and alternate years.) *Spring.* Mr. Honigmann.

124. FOLK AND PRIMITIVE TECHNOLOGIES (Anthropology 124) (3).
(1955-1956 and alternate years.) *Fall.* Mr. Honigmann.

126. RACES AND PEOPLES OF AFRICA (Anthropolgy 126) (3). Prerequisite, Folklore 185.
Fall. Materials fee, $1.00. Mr. Johnson.

127. NATIVE PEOPLES AND CULTURES OF MEXICO AND CENTRAL AMERICA (Anthropology 127) (3). Prerequisite, Folklore 185.
(1954-1955 and alternate years.) *Fall. Materials fee, $1.00.* Mr. Gillin.

128. FOLK CULTURES IN THE MODERN WORLD (Anthropolgy 128) (3). Prerequisite, Folklore 185.
(1955-1956 and alternate years.) *Fall. Materials fee, $1.00.* Mr. Gillin.

132. NATIVE PEOPLES AND CULTURES OF SOUTH AMERICA (Anthropology 132) (3). Prerequisite, Folklore 185.
(1955-1956 and alternate years.) *Spring. Materials fee, $1.00.* Mr. Gillin.

167. THE ENGLISH BALLAD (English 167) (3).
English and Scottish popular ballads and their survivals, particularly in North Carolina.
Spring. Mr. Hudson.

185. INTRODUCTION TO FOLKLORE (Comparative Literature 185) (Sociology and Anthropology 185) (3).
Definition and examples of folklore in general and its various categories. Collection, classification, and analysis of folklore materials. Bibliography.
Fall. Mr. Hudson.

Courses for Graduates

(For descriptions of courses below offered by the departments of Music and Sociology and Anthropology, see listings under department headings.)

*204. INTRODUCTION TO COMPARATIVE MUSICOLOGY (Music 204) (3).
Spring. Mr. Schinhan.

210. FOLK SOCIOLOGY (Sociology 210) (3). Prerequisite, Folklore 185.
Fall. Mr. Simpson.

230. RACE AND CULTURE CONTACTS (Anthropology 230) (3). Prerequisite, Folklore 185.
Spring. Mr. Johnson.

314. FOLK NARRATIVE (3). Prerequisite, Folklore 185.
Study of origin, development, and dissemination of myths, legends, and folktales, with a survey of their use in masterpieces of world literature.
Spring. Mr. Keller.

395. RESEARCH (3).
Research in a special field under the direction of members of the staff.

FRENCH

(See Romance Languages)

DEPARTMENT OF GEOLOGY AND GEOGRAPHY

Professors: †S. T. EMORY, ‡G. R. MACCARTHY, W. A. WHITE
Associate Professors: J. S. GIBSON, R. L. INGRAM
Assistant Professors: D. G. BASILE, V. I. MANN, W. H. WHEELER
Part-time Instructors: J. E. BAGWELL, W. S. ROGERS, III
Teaching Fellow: M. J. BRIGHT, JR.
Graduate Assistants: S. T. EMORY, JR., MRS. DORIS MCC. HOWELL, MRS. JACQUELINE S. INGRAM, D. S. KIRSTEIN, JR., MRS. ANNE MCC. MCFALL, W. D. REVES
Undergraduate Assistants: J. B. SHAFFER, R. R. THOMPSON, C. T. WIMBISH

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* Will be given as demand warrants.
† Absent on leave 1954-1955.
‡ Absent on leave, fall semester, 1954-1955.

GEOLOGY

The course requirements for the A.B. degree with major in geology are as follows: (1) six to eight courses in geology in addition to Geology 1 or 41, and Geology 42; (2) five to seven courses in allied sciences, including introductory chemistry and introductory physics (which may be taken in the General College); (3) five to seven courses outside the Division of the Natural Sciences. The A.B. program is not considered sufficient training for professional work in geology.

For B.S. in Geology the following are required:

General College

English 1, 2, 21
Foreign language 3, 4, 21 or 1, 2, 3, 4 (French, German, or Spanish)
Chemistry 11-21
Social Science 1-2
Geology 1 or 41, 42
Mathematics 7, 8 or 15-16
Geography 38
Physical Education 1, 2, 3, 4
Hygiene 11
Social Science elective
Humanities elective
Two electives from the list of sophomore electives on page 120.

Upper College

English 59
Physics 24-25
Geology 101, 103, 104, 105
Geology 107, 110, 111
Three non-divisional electives
Geology 128-129
At least two of the following: Geology 106, 108, 109
Three courses in allied sciences which must include one of the following:
a: Mathematics 31-32-33
b: Zoology 41-42
c: Botany 41-42
d: Chemistry 43-44
e: Physics 54

Graduate Degrees in Geology

Unless taken as an undergraduate, Geology 106, 108, 109, are required of all candidates for graduate degrees in Geology.

Courses for Undergraduates

There are three courses in geology designed for undergraduates. Geology 1 is a one-course introduction to geology, covering selected parts of the material studied in the two courses, Geology 41 and Geology 42. All three are open to freshmen, and all three are taught at the same level of difficulty. Choice between them should be made, for the general student, on the basis of time to be devoted to this study. Students who plan to major in geology should take Geology 41 rather than Geology 1.

1. ELEMENTS OF GEOLOGY (4). Freshman elective.
Minerals, rocks, topographic maps, the development of land forms, geologic processes, history of the earth.
Three lecture and two laboratory hours a week, fall, spring. Laboratory fee, $3.50. Staff.

41. INTRODUCTION TO PHYSICAL GEOLOGY (4).
Nature and origin of minerals and rocks, volcanoes, earthquakes, interior of the earth, origin of mountains, soil development, subsurface water, coastal features, evolution of landscapes, effects of glaciers, streams, and wind.
Three lecture and two laboratory hours a week, fall, spring. Laboratory fee, $3.50. Staff.

42. INTRODUCTION TO HISTORICAL GEOLOGY (4). Prerequisite, Geology 1 or 41.
The geologic history of the earth as recorded in the rocks and the fossils they contain. The development of life on earth from its ancient beginnings through prehistoric man.
Three lecture and two laboratory hours a week, spring. Laboratory fee, $3.50. Mr. Wheeler.

Courses for Graduates and Advanced Undergraduates

101. MINERALOGY (4). Prerequisites, Chemistry 11-21 and Geology 1 or 41, or special permission.
Two lecture and four laboratory hours a week, fall. Laboratory fee, $10.00. Mr. Mann.

103. GEOLOGIC FIELD METHODS (4). Prerequisite, Mathematics 8.
Elementary drafting and surveying for geologists.
Two lecture and four laboratory hours a week, fall. Laboratory fee, $5.00. Mr. Ingram.

104. GEOMORPHOLOGY (4). Prerequisites, Geology 1 or 41, general physics.
Three lecture and two laboratory hours a week, spring. Laboratory fee, $5.00. Mr. White.

105. STRATIGRAPHY (3). Prerequisite, Geology 42.
Two lecture and two laboratory hours a week, spring. Laboratory fee, $5.00. Mr. Wheeler.

106. INVERTEBRATE PALEONTOLOGY (3). Prerequisite, Geology 42.
Two lecture and two laboratory hours a week, fall. Laboratory fee, $5.00. Mr. Wheeler.

107. STRUCTURAL GEOLOGY (3). Prerequisites, Geology 103, general physics, or by permission.
Two lecture and two laboratory hours a week, fall. Laboratory fee, $5.00. Mr. MacCarthy.

108. ECONOMIC GEOLOGY (3). Prerequisite, Geology 107.
A study of mineral deposits.
Two lecture and two laboratory hours a week, spring. Laboratory fee, $5.00. Mr. Mann.

109. ELEMENTS OF GEOPHYSICS (3). Prerequisites, Geology 107, general physics.
Two lecture and two laboratory hours a week, spring. Laboratory fee, $5.00. Mr. MacCarthy.

110. IGNEOUS AND METAMORPHIC ROCKS (3). Prerequisites, Geology 42 and 101.

The megascopic description and the origin of the igneous and metamorphic rocks.

Two lecture and two laboratory hours a week, spring. Laboratory fee, $5.00. Mr. Mann.

111. SEDIMENTARY ROCKS (2). Prerequisites, Geology 42 and 101.

The megascopic description, the origin, and economic geology of the sedimentary rocks.

One lecture and two laboratory hours a week, spring. Laboratory fee, $3.00. Mr. Ingram.

115. GEOLOGIC HISTORY OF THE VERTEBRATES (3). Prerequisites, Geology 42 or Zoology 41.

(1955-1956 and alternate years.) *Three lectures a week, fall. Materials fee, $3.00.* Mr. Wheeler.

117. ROCK WEATHERING AND SOIL FORMATION (3). Prerequisites, Geology 110 and 111.

Includes x-ray diffraction studies of clay minerals.

(1956-1957 and alternate years.) *Two lecture and two laboratory hours a week, fall. Laboratory fee, $10.00.* Mr. Ingram.

122. PHYSIOGRAPHY OF THE EASTERN UNITED STATES (3). Prerequisites, Geology 1 or 41, 42, and 104.

(1955-1956 and alternate years.) *Three lectures a week, fall. Materials fee, $3.50.* Mr. White.

123. PHYSIOGRAPHY OF THE WESTERN UNITED STATES (3). Prerequisites, Geology 1 or 41, 42, and 104.

(1955-1956 and alternate years.) *Three lectures a week, spring. Materials fee, $3.50.* Mr. White.

127. PETROLEUM GEOLOGY (3). Prerequisites, Geology 105, 107, and 111.

(1956-1957 and alternate years.) *Two lecture and two laboratory hours a week, spring. Laboratory fee, $2.00.* Mr. Ingram.

128-129. SUMMER FIELD COURSES IN GEOLOGY (8). Prerequisites, Geology 101, 103, 110, 111.

Equivalent to eight hours a week for one semester. Staff.

144. OPTICAL MINERALOGY (5). Prerequisites, Geology 101, Physics 25.

Two lecture and six laboratory hours a week, fall. Laboratory fee, $5.00. Mr. Mann.

145. IGNEOUS AND METAMORPHIC PETROLOGY (5). Prerequisites, Geology 110, 144.

Megascopic and microscopic study of igneous and metamorphic rocks.

(1956-1957 and alternate years.) *Two lecture and six laboratory hours a week, spring. Laboratory fee, $5.00.* Mr. Mann.

147. DETERMINATIVE MINERALOGY (3). Prerequisite, Geology 101.

One lecture and four laboratory hours a week, on demand. Laboratory fee, $10.00. Mr. Mann.

166. VULCANOLOGY (3). Prerequisite, Geology 1 or 41.

This course serves as an introduction to vulcanism and related phenomena.

(1956-1957 and alternate years.) *Three lectures a week, fall. Materials fee, $3.50.* Mr. MacCarthy.

167. EARTHQUAKES AND RELATED PHENOMENA (3). Prerequisite, Geology 1 or 41.

Earthquakes: their causes and effects; methods of investigation; the theory and operation of seismic recording devices.

Three lecture hours a week, spring. Materials fee, $3.00. Mr. MacCarthy.

168-169. FIELD WORK IN GEOPHYSICS (4 each). Prerequisites, Geology 109, general physics.

Two lecture and four laboratory hours a week, on demand. Materials fee, $5.00 each course. Mr. MacCarthy.

Courses for Graduates

221, 222. ADVANCED STRUCTURAL GEOLOGY (5 each). Prerequisites, Geology 104, 107, 108.

(1956-1957 and alternate years.) *Three lecture and four laboratory hours a week. Laboratory fee, $5.00 each.* Mr. MacCarthy.

224, 225. ADVANCED ECONOMIC GEOLOGY (5 each). Prerequisites, Geology 104, 105, 111.

(1955-1956 and alternate years.) *Three lecture and four laboratory hours a week. Laboratory fee, $3.50 each.* Mr. Mann and Mr. Ingram.

241, 242. ADVANCED MINERALOGY (5 each). Prerequisites, Geology 144, 145, except by permission.

(Not offered in 1955-1956.) *Two lecture and six laboratory hours a week. Laboratory fee, $5.00 each.* Mr. Mann.

244, 245. ADVANCED PETROLOGY (5 each). Prerequisites, Geology 144, 145.

(Not offered in 1955-1956.) *Two lecture and six laboratory hours a week. Laboratory fee, $5.00 each.* Mr. Mann.

247, 248. SEDIMENTATION (5 each). Prerequisites, Geology 105, 106, 111.

(1955-1956 and alternate years.) *Three lecture and four laboratory hours a week, fall, spring. Laboratory fee, $5.00 each.* Mr. Ingram.

261, 262. APPLIED GEOPHYSICS (5 each). Prerequisites, Geology 109, Mathematics through calculus.

(1955-1956 and alternate years.) *Two lecture and six laboratory hours a week, fall, spring. Laboratory fee, $5.00 each.* Mr. MacCarthy.

265. THE PHYSICS OF THE EARTH: GEODYNAMICS (4). Prerequisite, Geology 107, except by special permission.

(1955-1956 and alternate years.) *Three lecture and two laboratory hours a week, fall. Materials fee, $3.50.* Mr. MacCarthy.

271, 272. ADVANCED GEOMORPHOLOGY (5 each). Prerequisites, Geology 104, 107.

(1956-1957 and alternate years.) *Five lecture hours a week, fall, spring. Materials fee, $2.00 each.* Mr. White.

281, 282. STRATIGRAPHY OF NORTH AMERICA (5 each). Prerequisites, Geology 105, 106.

(1956-1957 and alternate years.) *Three lecture and four laboratory hours a week, fall, spring. Laboratory fee, $3.50 each.* Mr. Wheeler.

284. PRINCIPLES OF PALEONTOLOGY (3). Prerequisites, Geology 106, Zoology 42.

(1956-1957 and alternate years.) *Three lectures a week, fall. Material fee, $3.50.* Mr. Wheeler.

285. ADVANCED PALEONTOLOGY (5). Prerequisite, Geology 106.
(1955-1956 and alternate years.) *Three lecture and four laboratory hours a week, fall. Laboratory fee, $5.00.* Mr. Wheeler.

288. MICROPALEONTOLOGY (5). Prerequisite, Geology 106.
(1955-1956 and alternate years.) *Three lecture and four laboratory hours a week, spring. Laboratory fee, $5.00.* Mr. Wheeler.

Research Courses

These courses are intended for applicants for advanced degrees. Laboratory work and conferences with the professor in charge of the work. Work in each of these courses may be continued under the same number with sub-letter designations.

321. RESEARCH IN STRUCTURAL GEOLOGY (2 or more semester hours). Mr. MacCarthy.

329. RESEARCH IN ECONOMIC GEOLOGY (2 or more semester hours). Mr. Mann.

341. RESEARCH IN MINERALOGY (2 or more semester hours). Mr. Mann.

348. RESEARCH IN SEDIMENTATION (2 or more semester hours). Mr. Ingram.

349. RESEARCH IN PETROLOGY (2 or more semester hours). Mr. Mann.

361. RESEARCH IN GEOPHYSICS (2 or more semester hours). Mr. MacCarthy.

371. RESEARCH IN GEOMORPHOLOGY (2 or more semester hours). Mr. White.

381. RESEARCH IN STRATIGRAPHY (2 or more semester hours). Mr. Wheeler.

389. RESEARCH IN PALEONTOLOGY (2 or more semester hours). Mr. Wheeler.

GEOGRAPHY

For A.B. with major in geography there are required, in addition to Geography 38 and Geology 1 or 41, six courses in geography and six courses in allied studies, selected with the approval of the chairman of the department. Six courses must be taken outside the Division of Natural Science.

Geography 38 is recommended as preparation for all advanced geography courses.

Courses for Undergraduates

38. INTRODUCTION TO GEOGRAPHY (4). Natural science credit.
A study of the physical basis of geography. Emphasis centers on the climatic environment as fundamental to an understanding of the distribution and activities of man.
Three lecture and two laboratory hours a week, each fall and spring. Laboratory fee, $3.00. Messrs. Emory, Gibson, Basile.

Courses for Graduates and Advanced Undergraduates

117. SOILS (3). Prerequisites, Geology 1 or 41, Chemistry 11-12, or consent of instructor. Natural science credit.

A study of the nature and geographic distribution of the soils of the world, with special emphasis on southeastern United States.

Three hours of lecture a week, in addition to field work, fall. Materials fee, $5.00 Mr. Gibson.

118. FIELD METHODS (3).

Spring. Materials fee, $3.50. Messrs. Gibson, Emory.

131. REGIONAL GEOGRAPHY OF THE SOUTH (3).

Spring. Materials fee, $2.00. Mr. Gibson.

132. LAND UTILIZATION AND SOIL CONSERVATION (3). Prerequisites, Geography 38 and Geology 1 or 41.

Spring. Materials fee, $2.00. Mr. Gibson.

151. URBAN GEOGRAPHY (3). Prerequisites, Geography 38 and two other courses in geography.

On demand. Materials fee, $2.00. Mr. Emory.

152. ECONOMIC GEOGRAPHY (3).

A study of the distribution, production, and utilization of the world's basic commodities.

Fall. Materials fee, $2.00. Mr. Basile.

153. POLITICAL GEOGRAPHY (3).

Spring. Materials fee, $2.00. Mr. Emory.

154. GEOGRAPHICAL INFLUENCES IN AMERICAN HISTORY (3).

Fall. Materials fee, $2.00. Mr. Emory.

155. CLIMATOLOGY (4). Natural science credit.

Three lecture and two laboratory hours a week, fall. Materials fee, $2.00. Mr. Gibson.

156. CONSERVATION OF NATURAL RESOURCES (3).

A study of American natural resources, particularly those of North Carolina and the South, with emphasis on their use, their abuse, and their conservation.

Three hours of lecture and field work a week. Materials fee, $2.00. Mr. Gibson.

157. REGIONAL GEOGRAPHY OF NORTH AMERICA (3).

Fall. Materials fee, $2.00. Mr. Gibson.

158. REGIONAL GEOGRAPHY OF EUROPE (3).

Spring. Materials fee, $2.00. Mr. Basile.

159. REGIONAL GEOGRAPHY OF SOUTH AMERICA (3).

Fall. Materials fee, $2.00. Mr. Basile.

160. REGIONAL GEOGRAPHY OF MIDDLE AMERICA (3).

Spring. Materials fee, $2.00. Mr. Basile.

164. METEOROLOGY (4). Prerequisites, Geography 38, general physics or equivalent.

Three lecture and two laboratory hours a week, on demand. Laboratory fee, $3.50. Mr. Gibson.

171. CARTOGRAPHY (3).
A study of the basic qualities and functions of maps, through the application of drafting techniques to the fundamental principles of map construction.
One lecture and four laboratory hours a week. Laboratory fee, $5.00. Mr. Gibson.

178, 179. FIELD COURSES IN GEOGRAPHY (4 each). Prerequisites, Geography 38, Geology 1 or 41.
Messrs. Emory, Basile, Gibson.

Courses for Graduates

211. SPECIAL WORK IN GEOGRAPHY (3 or more). Prerequisites, Geography 38, and two courses in the one hundred bracket.
Messrs. Emory, Gibson.

301. SEMINAR (3 or more).
On demand. Staff.

311. RESEARCH IN GEOGRAPHY (3 or more).
Messrs. Emory, Gibson.

315. THESIS (5 or more).

DEPARTMENT OF GERMANIC LANGUAGES

Professors: G. S. LANE, *W. P. FRIEDERICH, F. E. COENEN
Visiting Professor: JOHN G. KUNSTMANN
Associate Professor: H. W. REICHERT
Lecturer in German: ERNST MORWITZ
Part-time Instructors: J. E. ENGEL, LOYAL N. GOULD, KENNETH E. KEETON, OLIN B. MURRAY, JR., THOMAS O. PINKERTON; WALTER W. ARNDT (Russian)
Teaching Fellow: MARY GRAY PORTER

Students interested in having their undergraduate major in German should consult the departmental chairman in the second semester of their sophomore year if possible. Six courses are required in addition to German 21.

Courses for Undergraduates

1-2. ELEMENTARY GERMAN (6).
Three hours a week, both semesters. Mr. Reichert; instructors.

1L-2L. ELEMENTARY GERMAN (8).
Three hours a week lecture and two hours a week laboratory in spoken German. Mr. Reichert; instructors.

3-4. †INTERMEDIATE GERMAN (6).
Three hours a week, both semesters. Mr. Coenen; instructors.

21, 22. INTRODUCTION TO GERMAN LITERATURE (3 each). Prerequisite, German 4 or equivalent.
Three hours a week, both semesters. Mr. Morwitz, Mr. Kunstmann.

* Absent on leave, spring semester, 1955, fall semester, 1955-1956.
† German 3 and 4 may be taken separately for credit by properly qualified students who have fulfilled their language requirements.

31, 32. CONVERSATIONAL GERMAN (3 each). Prerequisite, German 4 or equivalent.

Three hours a week, both semesters. Mr. Reichert.

Course Without Credit for Graduate Students

101x, 102x. ELEMENTARY GERMAN FOR GRADUATE STUDENTS (no credit).

This course is designed for preparation for reading knowledge examinations for higher degrees. Passing of the examination at the end of 102x will certify that this requirement has been satisfied.

Three hours a week, both semesters. Fee, $15.00. Mr. Reichert and instructors.

Courses for Graduates and Advanced Undergraduates

109. GERMAN PROSE IN THE NINETEENTH CENTURY (3). Prerequisite, German 22 or the equivalent.

Study of the major prose writers of the nineteenth century. Readings, lectures, and reports.

Fall. Mr. Coenen.

111. GERMAN DRAMA IN THE NINETEENTH CENTURY (3). Prerequisite, German 22 or the equivalent.

Kleist, Grabbe, Büchner, Grillparzer, Hebbel, Ludwig. Readings, lectures, and reports.

Spring. Mr. Coenen.

115. THE GERMAN LYRIC FROM GOETHE TO THE PRESENT (3). Prerequisite, German 22 or the equivalent.

An analysis of the chief lyric poets, movements, and types of the past two hundred years.

Spring. Mr. Friederich.

121. GOETHE'S EARLY WORKS (TO THE ITALIAN JOURNEY) (3). Prerequisite, German 22 or the equivalent.

Study of his early life. Reading and interpretation of representative works. Lectures and reports.

Fall. ————————.

122. GOETHE'S LATER WORKS (3). Prerequisite, German 22 or the equivalent.

Goethe's life and works from 1788 to 1832, with special emphasis on *Wilhelm Meister* and *Faust* and on Goethe's attitude towards the Napoleonic Wars and Romanticism.

Spring. Mr. Friederich.

131. GERMAN LITERATURE OF THE EIGHTEENTH CENTURY (3). Prerequisite, German 22 or the equivalent.

The various literary trends of the eighteenth century (exclusive of Goethe and Schiller), with special emphasis on Lessing, Wieland, Klopstock, and Herder.

Fall. Mr. Friederich.

137. SURVEY OF GERMAN LITERATURE IN ENGLISH TRANSLATION (Comparative Literature 137) (3).

Fall. Mr. Reichert.

141. SCHILLER (3). Prerequisite, German 22 or the equivalent.
(1) Life and time; (2) dramatic works; (3) philosophic and aesthetic theory.
Spring. Mr. Reichert.

145. GERMAN PHONETICS (3). Prerequisite, German 31.
A course in German pronunication and phonetics for prospective teachers of German. Required of undergraduate majors and candidates for advanced degrees in German.
Spring. Mr. Coenen.

151. CONTEMPORARY GERMAN LITERATURE (1885-1950) (3). Prerequisite, German 22 or the equivalent.
A chronological survey from Hauptmann to the present: naturalism, impressionism, expressionism, and the literature of the war and post-war years.
Spring. Mr. Reichert.

155. GOETHE IN ENGLISH TRANSLATION (Comparative Literature 155) (3).
Fall. Mr. Friederich.

161. HISTORY OF THE GERMAN LANGUAGE (3). Prerequisite, a good reading knowledge of German.
Fall. Mr. Lane.

171. GERMAN CIVILIZATION. (3). Lectures given in German. Germany's cultural achievements in broad outline.
Spring. Mr. Reichert.

Courses for Graduates

201. MATERIALS AND METHODS OF RESEARCH (3).
Spring. Mr. Kunstmann.

221. GOTHIC (3).
Grammar and analysis of selections from the Gothic Bible. Comparison with the other Germanic languages, particularly Old English and Old High German.
Fall. Mr. Lane.

222. OLD HIGH GERMAN (3).
Grammar and reading of selected texts from Braune's *Althochdeutsches Lesebuch.* Lectures on historical phonology and morphology.
Spring. Mr. Lane.

223. COMPARATIVE GERMANIC GRAMMAR (3). Prerequisite, previous study of at least two older Germanic languages.
Spring, on demand. Mr. Lane.

232. OLD SAXON (3).
Grammar and readings from the Heliand. Especial attention paid to relationship with Old English on the one hand and Old High German on the other.
One semester, on demand. Mr. Lane.

233, 234. OLD NORSE (ICELANDIC) (3 each).
Grammar and readings from the prose Edda, the Icelandic sagas and (second semester) the poetic Edda.
Two semesters, on demand. Mr. Lane.

235, 236. MIDDLE HIGH GERMAN (3 each).
Grammar and reading of selections from some of the masterpieces of medieval German literature 1100-1300.
Two semesters, on demand. Mr. Kunstmann.

240, 241. READING COURSE (6).
A course designed to fill certain lacunae in a candidate's training. Readings, reports, brief discussions.
Through the year. Mr. Friederich.

252. LATE MEDIEVAL AND REFORMATION LITERATURE (3).
German literature from Meister Eckhardt to Fischart, with special emphasis on Humanism and Reformation.
Fall. Mr. Kunstmann.

253. THE BAROQUE CENTURY (3).
German literature, its problems and its spiritual and historical background from Opitz through the Thirty Years' War to Weise and Reuter.
Spring. Mr. Kunstmann.

261. PHILOSOPHICAL INFLUENCES ON GERMAN CLASSICISM AND ROMANTICISM (3).
Basic philosophical ideas in the literary work of Klopstock, Lessing, Herder, Wieland, Goethe, Schiller, and the German Romanticists.
Spring. Mr. Reichert.

262. THE ROMANTIC SCHOOL IN GERMANY (3).
Reading and interpretation of representative works. The importance of the period; its influence on Western literature. Lectures and reports.
Fall. Mr. Coenen.

341, 342. SEMINAR IN LITERATURE (3 each).
Three hours a week, according to need. Staff.

361, 362. SEMINAR IN LINGUISTICS (3 each).
Three hours a week, according to need. Mr. Lane.

395. RESEARCH (3). Staff.

RUSSIAN

RUSSIAN 76, 77. ELEMENTARY AND INTERMEDIATE RUSSIAN (3 each).
Three hours a week, both semesters. Mr. Arndt.

GREEK

(See Classics)

DEPARTMENT OF HISTORY

Professors: F. M. GREEN, *J. G. deR. HAMILTON, W. W. PIERSON, †M. B. GARRETT, ‡W. E. CALDWELL, L. C. MACKINNEY, H. T. LEFLER, C. H. PEGG, CECIL JOHNSON, J. C. SITTERSON, J. L. GODFREY, §J. W. PATTON
Associate Professors: H. A. BIERCK, JR., C. O. CATHEY, J. E. KING, ‖F. W. KLINGBERG, ¶A. J. GOING
Assistant Professors: E. P. DOUGLASS, G. V. TAYLOR
Teaching Fellows: ELIZABETH A. BARBER, D. W. STANDARD, F. L. TURNER
Waddell Memorial Fellows: J. M. MARTIN, H. R. PASCHAL, JR., ARDA S. WALKER
Graduate Assistants: R. J. CHASTEEN, I. A. HAMILTON

Social Science Staff

Assistant Professor: J. R. CALDWELL
Instructors in Social Science Affiliated with Department of History: J. B. MACLEOD, W. M. GEER
Instructor in Social Science Affiliated with Department of Political Science: F. H. HARRIS
Part-time Instructors: G. W. CLARKE, A. M. DENTON, JR., J. W. JOHNSON, C. L. PRICE, H. J. SHEELY, E. J. STEYTLER, PHILIP THAYER, J. C. WALLACE, R. D. WARD, F. H. WEAVER

A student choosing history as his major must select either American** *or* European†† history as his field of specialization and must complete a minimum of eight approved courses. He must take at least five of his eight courses in his field of specialization and may select the remaining three history courses from the minor field. Transfer students in history must take at least three approved history courses in the University. If, in the General College, the prospective American history major has completed History 21 and 22, or History 46 and 47, or History 71 and 72 with a C grade or better, these will be counted among the eight required courses. If, in the General College, the European history major has completed History 41 and 42, or History 44 and 45, or History 48 and 49 with a C grade or better, these will be counted among the eight required courses. These enumerated courses even when taken in the College of Arts and Sciences may apply towards the eight course requirements if they belong to the minor field. For instance, in these circumstances, History 41 and 42, or 44 and 45, or 48 and 49 count towards the eight course requirement for a student whose specialization is American history. In the same fashion History 71 and 72, or 46 and 47 count towards the requirement for a European specialization. (History 21 and 22, however, may not be taken for credit in the College of Arts and Sciences.)

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* Kenan Professor and Director of the Southern Historical Collection, Emeritus.
† Professor Emeritus.
‡ Absent on leave, fall semester, 1954.
§ Director of the Southern Historical Collection.
‖ Absent on leave, 1954-1955.
¶ Visiting Associate Professor, 1954-1955.
** American history includes United States and Latin American history.
†† European history includes Ancient, Medieval and Modern European and English history.

Courses for Undergraduates

1-2. SOCIAL SCIENCE (6). Freshman requirement. Prerequisite to all other courses in history.
Three hours a week, fall and spring. Fee for materials, $1.50 each semester. Members of staff.

21, 22. AMERICAN HISTORY: GENERAL COURSE (6). Sophomore elective.
Three hours a week, fall and spring. Messrs. Johnson, Cathey, Klingberg, and Going.

41, 42. ANCIENT AND MEDIEVAL HISTORY: GENERAL COURSE (6). Sophomore elective, open to juniors and seniors.
Three hours a week, fall and spring. Messrs. Caldwell and MacKinney.

44, 45. ENGLISH HISTORY: GENERAL COURSE (6). Sophomore elective, open to juniors and seniors.
Three hours a week, fall and spring. Mr. Godfrey.

46. LATIN AMERICAN HISTORY: COLONIAL AND REVOLUTIONARY PERIODS (3). Sophomore elective, open to juniors and seniors.
Three hours a week, fall. Mr. Bierck.

47. LATIN AMERICAN COUNTRIES DURING THE NATIONAL PERIOD (3). Sophomore elective, open to juniors and seniors.
Spring. Mr. Bierck.

48. MODERN EUROPEAN HISTORY, 1500-1815 (3). Sophomore elective, open to juniors and seniors.
Fall. Mr. King.

49. MODERN EUROPEAN HISTORY SINCE 1815 (3). Sophomore elective, open to juniors and seniors.
Spring. Mr. Taylor.

51. HISTORY OF THE ANCIENT NEAR EAST (3).
Spring. Mr. Caldwell.

52. HISTORY OF GREECE (3).
Fall. Mr. Caldwell.

53. HISTORY OF ROME (3).
Spring. Mr. Caldwell.

65. EUROPE AND THE NEAR EAST IN THE CRUSADING AGE, 1000-1300 (3).
(1955-1956 and alternate years.) *Fall.* Mr. MacKinney.

66. THE AGE OF THE RENAISSANCE, 1250-1550 (3).
(1954-1955 and alternate years.) *Spring.* Mr. MacKinney.

71. AMERICAN HISTORY TO 1865: GENERAL COURSE (3). Junior-senior elective.
Both 21 and 71 may not be taken for credit by a student.
Fall and spring. Messrs. Lefler, Sitterson, Cathey, Klingberg, Douglass, Going.

72. AMERICAN HISTORY SINCE 1865: GENERAL COURSE (3). Junior-senior elective.
Both 22 and 72 may not be taken for credit by a student.
Fall and spring. Messrs. Lefler, Sitterson, Cathey, Klingberg, Douglass, Going.

97. HONORS COURSE (3).
Required of all students reading for honors in history.
Mr. MacKinney.

98. HONORS COURSE (3).
Required of all students reading for honors in European history.
Members of European history staff.

99. HONORS COURSE (3).
Required of all students reading for honors in United States history.
Members of American history staff.

NOTE: Courses in Directed Teaching of the Social Sciences and in Materials and Methods of Teaching the Social Sciences will be found under the School of Education.

Courses for Graduates and Advanced Undergraduates

109. GREEK AND ROMAN HISTORICAL LITERATURE (Classics 109) (3).
Spring. Mr. Allen (of the Department of Classics).

110. EUROPEAN COLONIZATION OF THE NEW WORLD (3). Not open to graduate majors in American history.
Fall. Mr. Bierck.

111. EARLY AMERICAN HISTORY, 1689-1789 (3). Not open to graduate majors in American history.
Spring. Mr. Lefler.

112. UNITED STATES HISTORY, 1789-1848 (3). Not open to graduate majors in American history.
Fall. Mr. Cathey.

113. UNITED STATES HISTORY, 1848-1897 (3). Not open to graduate majors in American history.
Spring. Messrs. Klingberg, Going.

114. UNITED STATES HISTORY SINCE 1897 (3). Not open to graduate majors in American history.
Fall. Mr. Sitterson.

121. MEDIEVAL CULTURAL LIFE (3).
(1954-1955 and alternate years.) *Fall.* Mr. MacKinney.

122. SOCIAL-ECONOMIC HISTORY OF THE MIDDLE AGES (3).
(1955-1956 and alternate years.) *Fall.* Mr. MacKinney.

123. HISTORY OF SPAIN (3).
(1955-1956 and alternate years.) *Spring.* Mr. MacKinney.

125. THE INTELLECTUAL HISTORY OF EUROPE, SIXTEENTH AND SEVENTEENTH CENTURIES (3).
(1955-1956 and alternate years.) *Fall.* Mr. King.

126. THE INTELLECTUAL HISTORY OF EUROPE, EIGHTEENTH AND NINETEENTH CENTURIES (3).
(1955-1956 and alternate years.) *Spring.* Mr. King.

131. THE PROTESTANT REVOLT (3).
(1954-1955 and alternate years.) *Fall.* Mr. King.

132. THE RISE OF ABSOLUTISM IN EUROPE (3).
(1954-1955 and alternate years.) *Spring.* Mr. King.

133. EUROPE IN AN AGE OF REVOLUTION, 1789-1815 (3).
Fall. Mr. Taylor.

134. RISE OF DEMOCRACY AND NATIONALISM IN MODERN EUROPE (3).
Spring. Mr. Taylor.

135. EUROPE, 1870-1918 (3).
Fall. Mr. Pegg.

136. EUROPE SINCE 1918 (3).
Spring. Mr. Pegg.

137. MEDIEVAL ENGLAND
(1954-1955 and alternate years.) *Spring.* Mr. MacKinney.

138. ENGLAND FROM 1485 to 1760 (3).
(1955-1956 and alternate years.) *Fall.* Mr. Godfrey.

139. GREAT BRITAIN FROM 1760 to 1867 (3).
(1954-1955 and alternate years.) *Fall.* Mr. Godfrey.

140. GREAT BRITAIN SINCE 1867 (3).
Spring. Mr. Godfrey.

141. DEVELOPMENT OF THE ENGLISH CONSTITUTION (Political Science 154) (3).
Spring. Mr. Godfrey.

142. HISTORY OF MODERN RUSSIA (3).
Fall. Mr. Pegg.

143. THE DIPLOMATIC HISTORY OF THE UNITED STATES (3).
Spring. Mr. Johnson.

145. THE HISTORY OF AMERICAN IDEAS, 1607-1860 (3).
(1954-1955 and alternate years.) *Fall.* Mr. Douglass.

146. THE HISTORY OF AMERICAN IDEAS, 1860 TO PRESENT (3).
(1955-1956 and alternate years.) *Fall.* Mr. Douglass.

159. THE BRITISH EMPIRE (Political Science 159) (3).
Fall. Mr. Godfrey.

161. NORTH CAROLINA I, 1584-1835 (3).
Fall. Mr. Lefler.

162. NORTH CAROLINA II, 1835-1950 (3).
Spring. Mr. Lefler.

163. THE OLD SOUTH (3).
Fall. Mr. Green.

164. THE SOUTH SINCE RECONSTRUCTION (3).
Spring. Mr. Green.

167. ECONOMIC HISTORY OF THE UNITED STATES I, 1783-1860 (3).
(1955-1956 and alternate years.) *Spring.* Mr. Sitterson.

168. ECONOMIC HISTORY OF THE UNITED STATES II, 1860-1941 (3).
(1954-1955 and alternate years.) *Spring.* Mr. Sitterson.

170. SOCIAL AND EDUCATIONAL HISTORY OF THE UNITED STATES (Education 143) (3).
Fall. Messrs. A. K. King, Holton (of the School of Education).

171. ARGENTINA, BRAZIL, AND CHILE (3).
(1955-1956 and alternate years.) *Fall.* Mr. Bierck.

172. INTER-AMERICAN ECONOMIC AND CULTURAL RELATIONS (3).
(1954-1955 and alternate years.) *Spring.* Mr. Bierck.

173. THE BOLIVARIAN STATES SINCE INDEPENDENCE (3).
(1955-1956 and alternate years.) *Fall.* Mr. Bierck.

174. MEXICO, CENTRAL AMERICA, AND THE CARIBBEAN (3).
(1954-1955 and alternate years.) *Spring.* Mr. Bierck.

175. THE CONSTITUTION OF THE UNITED STATES (Political Science 155) (3).
Fall and spring. Materials fee, $1.00. Mr. Jenkins (of the Department of Political Science).

Courses for Graduates

*201. EUROPEAN HISTORIOGRAPHY (3).
Fall. Mr. King.

*202. AMERICAN HISTORIOGRAPHY (3).
Spring. Mr. Sitterson.

206. GREEK HISTORY, 500-146 B.C. (3).
(1955-1956 and alternate years.) *Fall.* Mr. Caldwell.

207. ROMAN HISTORY, 133-31 B.C. (3).
(1954-1955 and alternate years.) *Fall.* Mr. Caldwell.

208. ROMAN HISTORY, 31 B.C.-180 A.D. (3).
Spring. Mr. Caldwell.

224. THE AGE OF THE RENAISSANCE, 1250-1550 (3).
Spring. Mr. MacKinney.

233. PROBLEMS IN THE STUDY OF THE FRENCH REVOLUTION, 1789-1815 (3).
(1954-1955 and alternate years.) *Fall.* Mr. Taylor.

236. RECENT AND CONTEMPORARY EUROPEAN HISTORY (3).
Spring. Mr. Pegg.

249. CIVILIZATION IN THE AMERICAN COLONIES (3).
(1954-1955 and alternate years.) *Fall.* Mr. Lefler.

250. THE AMERICAN REVOLUTION AND ITS BACKGROUND (3).
(1955-1956 and alternate years.) *Fall.* Mr. Lefler.

251. THE FEDERAL PERIOD, 1783-1815 (3).
(1954-1955 and alternate years.) *Fall.* Mr. Douglass.

252. THE MIDDLE PERIOD, 1815-1860 (3).
(1955-1956 and alternate years.) *Fall.* Mr. Green.

254. CIVIL WAR AND RECONSTRUCTION (3).
(1954-1955 and alternate years.) *Spring.* Mr. Klingberg.

* Candidates for the A.M. degree will take 201 if their major is American history, 202 if their major is European history. Candidates for the Ph.D. degree will take both 201 and 202.

255. FOUNDATIONS OF MODERN AMERICA (3).
(1955-1956 and alternate years.) *Spring.* Mr. Klingberg.

256. RECENT AND CONTEMPORARY UNITED STATES (3).
(1954-1955 and alternate years.) *Fall.* Mr. Sitterson.

271. LATIN AMERICAN HISTORY: THE COLONIAL PERIOD AND THE WARS OF INDEPENDENCE (3).
(1954-1955 and alternate years.) *Spring.* Mr. Bierck.

272. LATIN AMERICAN HISTORY: DEVELOPMENT OF NATIONALITY IN SOUTH AMERICA (3).
(1955-1956 and alternate years.) *Spring.* Mr. Bierck.

301. ANCIENT HISTORY (3).
Conference and reports, three hours a week, spring. Mr. Caldwell.

311. MEDIEVAL HISTORY (3).
Conference and reports, three hours a week, fall. Mr. MacKinney.

320. EARLY MODERN EUROPEAN HISTORY (3).
Conference and reports, spring. Mr. King.

321ab. RECENT MODERN EUROPEAN HISTORY (3 each).
Conference and reports, three hours a week, fall and spring. Mr. Pegg.

323ab. MODERN ENGLISH HISTORY (3 each).
Conference and reports, three hours a week, fall and spring. Mr. Godfrey.

331. AMERICAN COLONIAL HISTORY (3).
Conference and reports, three hours a week, spring. Mr. Lefler.

335ab. THE NATION AND THE SECTIONS (3 each).
Conference and reports, three hours a week, fall and spring. Mr. Green.

336. CIVIL WAR AND RECONSTRUCTION (3).
Conference and reports, three hours a week, spring. Mr. Klingberg.

337. RECENT HISTORY OF THE UNITED STATES (3).
Conference and reports, three hours a week, fall. Mr. Sitterson.

341. READING COURSE (3).
Fall and spring. Members of the graduate faculty.

370a. LATIN AMERICAN HISTORY (3).
Conference and reports, three hours a week, fall. Mr. Bierck.

370b. LATIN AMERICAN HISTORY (3).
Conference and reports, three hours a week, spring. Mr. Pierson.

375. THESIS COURSE (3).
Fall and spring. Members of the graduate faculty.

SCHOOL OF JOURNALISM

Professors: NORVAL NEIL LUXON, O. J. COFFIN, C. P. RUSSELL, *J. R. PARKER, WALTER SPEARMAN
Associate Professors: S. W. SEGHRIEST, J. L. MORRISON, ROY E. CARTER, JR.
Assistant Professor: JAMES C. N. PAUL
Director of Advertising: L. M. POLLANDER
Teaching Assistant: BEVERLY W. WALLIN

* Professor Emeritus.

Courses in the School of Journalism are open to juniors, seniors, and graduate students in other schools in the University, but registration should be made only after consultation with the Dean of the School of Journalism.

Curriculum leading to the Degree of A.B. in Journalism: The course of study for the first two years is the same as that required of other candidates for the A.B. degree. Students are advised to meet their social science requirement by taking Social Science 1 and 2 and Political Science 41.

The professional program of the School of Journalism consists of eight to ten journalism courses, four of which are specified; two American history or North Carolina history courses; two courses in political science, one in economics, and electives to complete hours and courses for the A.B. degree. Secondary concentration in one of the social sciences or in some other related academic field is encouraged.

The four journalism courses required of all candidates for the A.B. in Journalism are 53, News Writing I; 57, News Editing; 161, History of Journalism; and 184, The Press, the Constitution, and the Law.

Journalism assignments must be typewritten; therefore it is essential that each student be able to type with reasonable skill and speed.

A graduate minor in journalism is available for candidates for the M.A. and Ph.D. degrees in English, history, political science, psychology, and sociology, and the M.A. in Communication.

At press time for the General Catalogue, the School of Journalism had a request awaiting action by the Administrative Board of the Graduate School for a graduate major in journalism leading to the A.M. degree. Four new courses: International Communications and Comparative Journalism and Communication and Opinion for advanced undergraduates and graduate students, and Mediak Research Methods and Seminar in Content Analysis for graduate students, are included in the proposal. The A.M. program and the additional courses may be available to students in the fall semester of 1955-1956. Students interested should write to the Dean, School of Journalism, for latest information.

Courses for Undergraduates

53. NEWS WRITING I (3). Prerequisite for Journalism 54.
Fall and spring. Laboratory fee, $2.00. Messrs Morrison, Carter.

54. NEWS WRITING II (3). Prerequisite, Journalism 53 or the equivalent.
Fall and spring. Laboratory fee, $2.00. Messrs. Morrison, Spearman.

55. NEWS WRITING III (3). Prerequisites, Journalism 53 and 54 or the equivalent.
Fall and spring. Laboratory fee, $2.00. Mr. Spearman.

56ab. FEATURE WRITING (2 each).
Fall and spring. Mr. Coffin.

57. NEWS EDITING (3). Prerequisite, Journalism 53.
Study and practice in copy reading, headline writing, proofreading; with attention given to printing terminology, page makeup, type structures, and content analysis of newspapers.
Fall and spring. Laboratory fee, $2.00. Mr. Sechriest.

58. EDITORIAL WRITING (2).
Fall and spring. Mr. Coffin.

59. COUNTRY NEWSPAPER PRODUCTION (3).
Fall and spring. Laboratory fee, $2.00. Mr. Carter.

60. BOOK REVIEWING AND DRAMATIC CRITICISM FOR NEWSPAPERS (2).
Fall and spring. Mr. Spearman.

62. NEWSPAPER ADVERTISING I (3).
A beginning course in advertising theory and practice involving mainly newspaper advertising, but also covering briefly the other media such as: radio, magazines, direct mail, outdoor, and television.
Two lecture and two laboratory hours a week, fall and spring. Laboratory fee, $2.00. Mr. Pollander.

63. NEWSPAPER ADVERTISING II (3). Prerequisite, Journalism 62.
A continuation of the material covered in Journalism 62. The procedure involved in selling retail advertising, and formulating a retail sales plan and advertising budget, is studied.
Two lecture and two laboratory hours a week, fall and spring. Laboratory fee, $2.00. Mr. Pollander.

64, 65. CREATIVE WRITING (3 each). Permission of instructor necessary.
Continuing courses, one taught each semester. Mr. Russell.

Note: These courses available, by arrangement with the instructor, to those with majors in other fields. See English 53.

67. ADVERTISING COPYWRITING (2). Prerequisite, Journalism 62.
This course involves both theory and practice. Preparation for writing successful advertising copy for all media, covering both the retail and national levels.
Fall and spring. Laboratory fee, $2.00. Mr. Pollander.

73. RADIO JOURNALISM (3).
Class members write and edit copy for the air, this work supplemented by experience gained writing news copy used by the University's radio station, WUNC.
Fall and spring. Fee for materials, $2.00. Mr. Morrison.

74. BUSINESS JOURNALISM (3).
Subject matter includes trade journals, house organs, and publicity. Students query business paper editors by mail, write and sell articles as part of their course work.
Fall and spring. Mr. Morrison.

80. NEWS PHOTOGRAPHY (2). Instructor's permission necessary.
Two lecture and two laboratory hours a week, fall and spring. Laboratory fee, $2.00. Mr. Sechriest.

Courses for Graduates and Advanced Undergraduates

161. HISTORY OF JOURNALISM (3).
History of United States newspapers from 1690 to the mid-twentieth century with some attention to magazines and class periodicals.
Fall. Mr. Luxon.

184. THE PRESS, THE CONSTITUTION, AND THE LAW (3).
The concept of freedom of the press and its development under the Constitution of the United States and state and federal laws. Governmental regulations affecting the press. Libel, contempt, right of privacy, inspection of public records, copyright, and other laws.
Spring. Mr. Paul.

191. FUNCTIONS AND RESPONSIBILITIES OF CONTEMPORARY JOURNALISM (3). Permission of instructor required for non-majors in journalism.
Study of the functions and responsibilities of newspapers, radio, television, and magazines as media of mass communications in modern society with emphasis on the role of the press.
Spring. Mr. Luxon.

Courses for Graduates

301. SEMINAR IN HISTORY OF AMERICAN JOURNALISM (3).
A study of American journalism, covering individual editors, newspapers, magazines, or segments of the press.
Fall and spring. Mr. Luxon.

LATIN
(See Classics)

DEPARTMENT OF LIBRARY SCIENCE

Professor: LUCILE KELLING
Assistant Professors: MARGARET E. KALP, SARAH R. REED

The courses listed below may be taken by advanced undergraduates in the College of Arts and Sciences or in the School of Education with the approval of the Dean of the School of Library Science. They are planned for students who wish to meet the requirements for certification as school librarians in North Carolina. Besides the courses listed below, the student will take the courses in education required for certification and a major program in English, French, Latin, mathematics, natural science, or social science. These programs are outlined under the School of Education (pp. 136-47). Library Science is not a major teaching field.

Students who choose library science as a second teaching field but who wish to meet North Carolina school library certification requirements will take all of the courses listed below except Library Science 93; those who choose a minor program will omit Library Science 9 and 96.

The courses described below also meet the requirements in library science for admission to the program leading to the degree of Master of School Librarianship.

Courses for Undergraduates

*93. SURVEY AND EVALUATION OF BOOKS AND RELATED MATERIALS FOR CHILDREN (3).
A survey course in children's literature with emphasis on current books and materials, designed solely for prospective classroom teachers in elementary schools.
Fall. Miss Kalp.

†94. PLACE OF THE LIBRARY IN THE SCHOOL (3).
The relationship of the library to the school as a whole, the library's contributions to the school program, and faculty-student-library cooperation.
(Not offered in 1954-1955.) Miss Kalp.

†95. SELECTION AND USE OF REFERENCE MATERIALS (3).
A study of basic reference materials for a school library with problems involving the use of these materials.
(Not offered in 1954-1955.) Miss Reed.

†96. CATALOGING AND CLASSIFICATION FOR SCHOOL LIBRARIES (3).
The fundamentals of cataloging, classification and assigning subject headings, including the use of related aids, printed cards, and special adaptations of the school library card catalog.
(Not offered in 1954-1955.) Miss Kalp.

122. THE SELECTION OF BOOKS AND RELATED MATERIALS FOR YOUNG PEOPLE (3).
A survey of library materials particularly suited for the use of the adolescent reader, with emphasis on readability and reading interest.
Spring. Miss Kalp.

123. THE SELECTION OF BOOKS AND RELATED MATERIALS FOR CHILDREN (3).
A survey of children's literature, including its historical development as well as current materials, designed for school librarians and librarians working with children in public libraries.
Spring. Miss Kalp.

143. SCHOOL LIBRARY ORGANIZATION AND ADMINISTRATION (3).
Organization and administration of school libraries, including planning of rooms, equipment, routines, schedules, publicity and display, the work of student assistants and the handling of audio-visual materials.
Fall. Miss Kalp.

* Not included in the 18 semester hour program for school librarians; a special course for elementary school teachers only.
† Offered in fall when demand warrants.

DEPARTMENT OF MATHEMATICS

Professors: *W. M. WHYBURN, †ARCHIBALD HENDERSON, †T. F. HICKERSON, J. W. LASLEY, JR., A. W. HOBBS, E. T. BROWNE, E. L. MACKIE, J. B. LINKER, M. A. HILL, A. S. WINSOR, R. M. TRIMBLE, V. A. HOYLE, E. A. CAMERON, A. T. BRAUER, F. B. JONES
Associate Professors: L. L. GARNER, W. R. MANN
Assistant Professor: J. S. MAC NERNEY
Lecturer: T. J. PIGNANI
Part-time Instructors: C. W. BARNES, A. S. DAVIS, ALICE M. DIBBEN, P. W. DIBBEN, T. E. GILMER, JR., MILLICENT C. HANKLA, MARILYN L. MARSHALL, J. E. MARTIN, ANN R. MERZBACHER, H. C. MILLER, JR., TINY M. MORROW, R. J. PAINTER, SUE H. SHUGART, H. M. STARR, T. H. SUMNER
Teaching Fellows: M. B. SMITH, JR., E. A. TRAYNOR

For the degree of A.B. with major in mathematics there are required:

I. From six to eight courses beyond Mathematics 31. These courses shall include:

(a) Mathematics 32, 33, 36; or 34-35, 36; or their equivalent.

(b) At least three courses numbered 100 or above, of which two or more shall be in pure mathematics.

II. From five to seven courses from the departments of Botany, Chemistry, Geology, Physics, Psychology, Zoology and Philosophy 21, 134 or 141.

III. From five to seven courses outside the Division of Natural Sciences.

The following curriculum leading to the Bachelor of Science degree in Mathematics is now available:

FRESHMAN AND SOPHOMORE YEARS

Mathematics 7, 8, 31 (or 15, 16); 34-35 (or 32, 33)
English 1, 2, 21
Social Science 1-2
French or German 3, 4, 21 (or 1, 2, 3, 4)
Humanities elective—one course
Sophomore social science elective—one course
Physics 24, 25 (or 34, 35); or
Chemistry 11-12 (or 11-21) if the two physics courses are elected in the junior or senior years
Hygiene 11
Physical Education 1, 2, 3, 4
Free electives to meet total unit requirement

JUNIOR AND SENIOR YEARS

Six courses in mathematics, including 141, and 131 or 136
Four non-divisional courses
Free electives to complete total unit requirement
Six divisional courses of which one must be Botany 41 or Zoology 41, and among which no mathematics courses except Mathematics 41 and/or 51 may be included

* Absent on leave, 1954-1955.
† Kenan Professor Emeritus.

The department has a committee to advise students interested in preparation for actuarial work.

Before registering for Mathematics 7, Mathematics 11, or Mathematics 15, each student is required to take a mathematics placement test.

Courses for Undergraduates

7. COLLEGE ALGEBRA (3).
Fall and spring. Staff.

8. PLANE TRIGONOMETRY (3).
Fall and spring. Staff.

10. MATHEMATICS OF FINANCE (3).
Fall and spring. Staff.

11, 12. INTRODUCTION TO MATHEMATICS (3 each).
An elementary treatment of fundamental mathematical concepts including topics from logic, the number system, equations, exponents and logarithms, algebraic and trigonometric functions, analytic geometry, calculus, and statistics.
Fall and spring. Staff.

15, 16. INTRODUCTION TO MATHEMATICAL ANALYSIS (3 each).
Graphs, average rates, limits, instantaneous rates; algebraic, trigonometric, exponential and logarithmic functions, elementary differentiation and integration, areas, volumes, series.
Fall and spring. Staff.

31. PLANE ANALYTIC GEOMETRY (3). Prerequisites, Mathematics 7 and 8.
Fall and spring. Staff.

32. DIFFERENTIAL CALCULUS (3). Prerequisite, Mathematics 16 or 31. With special permission, 31 may be taken simultaneously with 32.
Fall and spring. Staff.

33. INTEGRAL CALCULUS (3). Prerequisite, Mathematics 32.
Fall and spring. Staff.

34-35. INTENSIVE COURSE IN THE DIFFERENTIAL AND INTEGRAL CALCULUS (6). Prerequisite, Mathematics 16 or 31.
A two-semester course in which calculus principles and operations share emphasis. Designed especially for majors in mathematics and closely related fields.
Fall and spring. Messrs. Mackie and Winsor.

36. TOPICS IN CALCULUS (3). Prerequisite, Mathematics 33 or 35.
Partial differentiation, limits and continuity, multiple integrals, series.
Spring. Messrs. Mackie and Winsor.

41. MECHANICAL DRAWING (3).
Five hours a week, fall and spring. Laboratory fee, $1.00. Mr. Trimble.

51. PLANE SURVEYING (3). Prerequisites, Mathematics 7 and 8.
Three lecture and two field hours a week, fall and spring. Laboratory fee, $4.00. Mr. Trimble.

62. INTRODUCTORY STATISTICS (3). Prerequisites, Mathematics 7 and 8 or 10.
(1954-1955 and alternate years.) *Spring.* Mr. Hill.

Courses for Graduates and Advanced Undergraduates

102. ELEMENTARY ALGEBRA FROM AN ADVANCED VIEWPOINT (3). Prerequisite, Mathematics 33.

Designed especially for teachers, the course treats topics of algebra in a way that provides both the skill and the mathematical maturity needed for good instruction in the subject.

Spring. Mr. Hoyle.

103. INTRODUCTION TO HIGHER GEOMETRY (3). Prerequisite, Mathematics 33.

A triangle and its associated circles. Orthogonal circles and inverse points. Poles and polars. Coaxal circles. Isogonal lines. Similitude. Inversion. Brocard's figures. Lemoine circles.

Spring. Mr. Winsor.

105. HISTORY OF MATHEMATICS (3).

Summer session. Mr. Garner.

110. CALCULUS OF FINITE DIFFERENCES (3). Prerequisite, Mathematics 33 or equivalent.

Finite differentiation, summation of series, relations among operators, interpolation formulas, Bernoulli's and Euler's polynomials, solution of difference equations.

Spring. Mr. Garner.

111. ELEMENTARY MATHEMATICAL STATISTICS (3). Prerequisite, Mathematics 33 or equivalent.

A course dealing with elementary theory and applications, with special emphasis on the mathematical development of frequency curves, correlation, sampling, etc.

Fall. Mr. Hill.

116. FUNDAMENTAL CONCEPTS (3). Prerequisite, Mathematics 33 or consent of the instructor.

A study of some basic mathematical concepts such as number systems, algebraic structures, types of geometries, functions, limits, axiomatic foundations. Especially designed for teachers of mathematics.

Summer session. Mr. Cameron.

117. ANALYTIC GEOMETRY FROM A HIGHER STANDPOINT (3). Prerequisite, Mathematics 33 or consent of the instructor.

Concepts of analytic geometry of the plane and of space treated projectively. Especial emphasis upon the relation to elementary algebra. Contacts with advanced mathematics, the group idea, linear equations, determinants, matrices. Linear transformation. Affine geometry. Collineations. Especially for teachers of mathematics.

Summer session. Mr. Lasley.

121. THEORETICAL AND APPLIED MECHANICS (3). Prerequisite, Mathematics 33 or equivalent.

Spring. Mr. Trimble.

131. THEORY OF EQUATIONS (3). Prerequisite, Mathematics 33 or equivalent.

Properties of polynomials in a field, equations in the rational and real number fields, elimination, resultants, symmetric functions, algebraic field extensions, and ruler and compass constructions.

Fall. Mr. Brauer.

136. INTRODUCTION TO MODERN ALGEBRA (3). Prerequisite, Mathematics 33 or equivalent.

Introduction to integral domains, fields, groups, vector spaces, theory of linear dependence, systems of linear equations, linear transformations, and matrices.

Spring. Mr. Cameron.

138. VECTOR SPACES AND MATRICES (3). Prerequisite, Mathematics 33 or equivalent.

Introduction to the theory of finite dimensional spaces, matrices treated from the standpoint of linear transformations.

Summer session. Mr. Cameron.

141. DIFFERENTIAL EQUATIONS (3). Prerequisite, Mathematics 33 or equivalent.

This course is designed for students specializing in mathematics and the sciences. It treats ordinary differential equations with applications in mechanics, geometry, and physics.

Fall and spring. Mr. Linker.

143. PARTIAL DIFFERENTIAL EQUATIONS (3). Prerequisite, Mathematics 141.

A study of some of the partial differential equations of physics and boundary problems.

(1954-1955 and alternate years.) *Spring.* Mr. Hobbs.

147. INTRODUCTION TO THE THEORY OF DETERMINANTS AND MATRICES (3). Prerequisite, Mathematics 33 or equivalent.

A study of the basic concepts and theorems concerning determinants and matrices; designed principally for students of statistics but open also to other students of mathematics.

Fall. Mr. Browne.

150. SYNTHETIC PROJECTIVE GEOMETRY (3). Prerequisite, Mathematics 33 or equivalent.

A study of forms of the first and second orders by synthetic methods. Projective correspondences, poles and polars, metric specializations.

Summer session. Mr. Lasley.

151. ANALYTIC PROJECTIVE GEOMETRY (3). Prerequisite, Mathematics 33 or equivalent.

Projective coordinates, projective correspondences, analytic methods applied to forms of first and second dimensions. Special emphasis upon implications in the theory of Equations and Analytic Geometry of Conics. Some line geometry.

(1955-1956 and alternate years.) *Fall.* Mr. Lasley.

161. ANALYTIC GEOMETRY OF SPACE (3). Prerequisite, Mathematics 33 or equivalent.

A study from the analytic point of view of loci in three dimensions, with special emphasis on systems of planes and on quadric surfaces.

(1954-1955 and alternate years.) *Fall.* Mr. Lasley.

163. ELEMENTARY POINT-SET THEORY (3). Prerequisite, Mathematics 33 or equivalent.

Introduction to the study of point sets on the line and in the plane with applications to the foundations of calculus and analysis.

Fall. Mr. Jones.

171. ADVANCED CALCULUS I (3). Prerequisite, Mathematics 33 or equivalent. Mathematics 36 and 141 are recommended.

Limits, continuity, infinitesimals, differentials, power series, partial and implicit differentiation, definite and line integrals.

Fall. Mr. Hobbs.

172. ADVANCED CALCULUS II (3). Prerequisite, Mathematics 171.

Gamma and beta functions; Legendre polynomials; Bessel functions; Fourier series; Laplace's equation; Harmonic functions; Potential.

Spring. Mr. Hobbs.

173. TOPICS IN APPLIED MATHEMATICS I (3). Prerequisite, Mathematics 171-172 or equivalent.

Variational methods; integral equations; integral transforms.

(1955-1956 and alternate years.) *Fall.* Mr. Mann.

174. TOPICS IN APPLIED MATHEMATICS II (3). Prerequisite, Mathematics 171-172 or equivalent.

Finite difference approximations to boundary value problems—convergence and stability criteria; theory of characteristics; iterative procedures.

(1954-1955 and alternate years.) *Fall.* Mr. Mann.

175. TOPICS IN ANALYSIS (3). Prerequisite, Mathematics 171.

Functional dependence; infinite products and series; improper integrals; fundamental existence theorems for implicit functions and differential equations.

Summer session. Mr. Whyburn.

176. FUNCTIONS OF A COMPLEX VARIABLE I (3). Prerequisite, Mathematics 36 or equivalent. Mathematics 163 and 171 are recommended.

Analytic properties of the number plane, continuity and integration of functions, elementary mapping, power series, analytic continuation, and properties of analytic functions.

Fall. Mr. Mac Nerney.

177. FUNCTIONS OF A COMPLEX VARIABLE II (3). Prerequisite, Mathematics 176.

Further properties of analytic functions, residues and contours, entire functions, meromorphic functions, conformal transformations, and functions defined by infinite processes.

Spring. Mr. Mac Nerney.

178. SPECIAL FUNCTIONS (3). Prerequisite, Mathematics 176.

A study of the more important properties of Bessel, Hankel, and Neumann functions; the gamma and beta functions; the hypergeometric function; surface and spherical harmonics; Legendre, Laguerre, and Hermite polynomials.

Spring. Mr. Mann.

179. SUMMABILITY (3). Prerequisite, Mathematics 36 or equivalent.

Summation of divergent series by averaging processes, and generalization to the methods of Abel, Hausdorff, et al.

Summer session. Mr. Mac Nerney.

181. ELEMENTARY THEORY OF NUMBERS I (3).

An elementary course in theory of rational integers, divisibility, scales, simples properties of prime numbers, Diophantine equations, congruences. Application in elementary mathematics and mathematical games.

Fall. Mr. Brauer.

182. ELEMENTARY THEORY OF NUMBERS II (3). Prerequisite, Mathematics 181.

Continuation of Mathematics 181. Quadratic residues, arithmetic theory of binary quadratic forms. Recent results in elementary number theory.

(1955-1956 and alternate years.) *Spring.* Mr. Brauer.

191. VECTOR AND TENSOR ANALYSIS (3). Prerequisites, Mathematics 141 and 161 or equivalent.

Vector and tensor algebra applied to geometry and physics. Students taking this course should be familiar with ordinary differential equations and should have some knowledge of analytic geometry of three dimensions.

(1955-1956 and alternate years.) *Fall.* Mr. Hoyle.

196. THEORY OF FUNCTIONS OF REAL VARIABLES I (3). Prerequisite, Mathematics 171.

The real number system; theory of measure; correspondences and transformations, differentiation.

Spring. Mr. Whyburn.

Courses for Graduates

208. CONFORMAL MAPPING (3). Prerequisite, Mathematics 177 or equivalent.

Some of the modern aspects of the theory of conformal mapping, and its connections with moment problems, continued fractions, etc.

Fall. Mr. Mac Nerney.

210. INTRODUCTION TO HILBERT SPACES (3). Prerequisite, Mathematics 177 or equivalent.

Axiomatic foundations of Hilbert-type spaces; linear transformations; relationship with integral equations and infinite matrices.

Spring. Mr. Mac Nerney.

226. FOUNDATIONS OF GEOMETRY (3).

A study of rigorous logic in geometry; postulates, systems of geometry, etc. Contributions of Pasch, Peano, Hilbert, Veblen, and the postulation school.

Summer session. Mr. Whyburn.

231. ADVANCED NUMBER THEORY OF RATIONAL INTEGERS (3). Prerequisite, Mathematics 181.

Selected problems of additive number theory and the geometry of numbers. Introduction to the analytic theory of numbers.

(1954-1955 and alternate years.) *Fall.* Mr. Brauer.

232. GENERAL THEORY OF ALGEBRAIC NUMBERS (3). Prerequisites, Mathematics 131 and 181.

Algebraic numbers and transcendental numbers; general algebraic fields; theory ideals; discriminants and unities of algebraic fields.

(1954-1955 and alternate years.) *Spring.* Mr. Brauer.

233. NUMBER THEORY OF SPECIAL FIELDS (3). Prerequisites, Mathematics 131 and 181.

Transcendence of e and π. Number theory in Euclidean fields, quadratic, cubic, and cyclotomic fields.

(1954-1955 and alternate years.) *Spring.* Mr. Brauer.

234. SOME RECENT RESULTS IN NUMBER THEORY (3).

Summer session. Mr. Brauer.

235. SOME RECENT RESULTS IN ALGEBRA (3).
(1955-1956 and alternate years.) *Spring.* Mr. Brauer.

236. HIGHER PLANE CURVES (3). Prerequisite, Mathematics 151.
Applications of projective geometry to curves of degree higher than two; special types of curves; relationships; properties.
(1955-1956 and alternate years.) *Spring.* Mr. Lasley.

246. MODERN HIGHER ALGEBRA (3). Prerequisite, Mathematics 131 or 136.
A course dealing with certain fundamental aspects of modern algebra, including the topics of groups, rings, and fields.
(1954-1955 and alternate years.) *Spring.* Mr. Browne.

247. THE THEORY OF MATRICES (3). Prerequisite, Mathematics 147.
A course designed to give the student a thorough grounding in some of the recent and most important results in the study of algebraic matrices.
(1955-1956 and alternate years.) *Spring.* Mr. Browne.

261. DIFFERENTIAL GEOMETRY (3). Prerequisites, Mathematics 141 and 161.
A study of the metric differential properties of curves, surfaces, and curves on surfaces by means of differential equations.
(1954-1955 and alternate years.) *Spring.* Mr. Lasley.

267. THEORY OF FUNCTIONS OF REAL VARIABLES II (3). Prerequisite, Mathematics 196.
Functions, continuity, measurability, Riemann and Lebesgue integration, Baire classes.
Fall. Mr. Whyburn.

268. ADVANCED DIFFERENTIAL EQUATIONS (3). Prerequisite, Mathematics 267 or equivalent.
Fundamental existence theorems for ordinary equations, boundary value problems, applications to classical problems of mathematical physics.
Spring. Mr. Whyburn.

280. CALCULUS OF VARIATIONS (3). Prerequisites, Mathematics 141 and 171.
The determination of necessary and sufficient conditions for functions which minimize certain definite integrals.
(1954-1955 and alternate years.) *Fall.* Mr. Mackie.

281. GENERAL TOPOLOGY I (3).
A general introduction to point-set theoretic methods and axiomatic foundations.
(1955-1956 and alternate years.) *Fall.* Mr. Jones.

282. GENERAL TOPOLOGY II (3). Prerequisite, Mathematics 281.
A continuation of Mathematics 281.
(1955-1956 and alternate years.) *Spring.* Mr. Jones.

283. GENERAL TOPOLOGY III (3). Prerequisite, Mathematics 282.
A continuation of Mathematics 282.
(1954-1955 and alternate years.) *Fall.* Mr. Jones.

284. GENERAL TOPOLOGY IV (3). Prerequisite, Mathematics 283.
A continuation of Mathematics 283.
(1954-1955 and alternate years.) *Spring.* Mr. Jones.

291. THEORY OF GROUPS (3). Prerequisite, Mathematics 136 or equivalent. Properties of abstract groups, groups with operators, homomorphism, composition series, the Sylow theorems, direct sums, K-modules, and Abelian groups. *Fall.* Mr. Cameron.

297. GALOIS THEORY (3). Prerequisite, Mathematics 246 or 291. Theory of fields, Galois theory, ideals, and other topics in modern algebra. *Spring.* Mr. Cameron.

SEMINARS AND THESES (3).
351, Mr. Whyburn; 352, Mr. Mac Nerney; 356, Mr. Lasley; 357, Mr. Jones; 361, Mr. Hobbs; 366, Mr. Browne; 367, Mr. Garner; 371, Mr. Winsor; 372, Mr. Hoyle; 376, Mr. Mackie; 377, Mr. Hill; 381, Mr. Brauer; 382, Mr. Cameron; 387, Mr. Mann.

DEPARTMENT OF MUSIC

Professors: GLEN HAYDON, EARL SLOCUM, J. P. SCHINHAN
Associate Professors: W. S. NEWMAN, WILTON MASON
Assistant Professor: JOEL CARTER
Instructor: EDGAR ALDEN
Part-time Instructor: ROBERT L. WEAVER
Graduate Assistants: MELVIN BERNSTEIN, MARY GRAY CLARKE, HERBERT FRED, CAROLINE SITES, LILIAN PIBERNIK, GENE PAUL STRASSLER
Assistant: THOMAS WHEELER

The courses in music are designed to serve four purposes in the University: a) to provide thorough training in the practice, literature, theory, and history of music for the student who elects music as his major subject in the liberal arts curriculum leading to the A.B. degree; b) to provide a solid foundation for the student who wishes to do graduate work in the more scholarly, technical, or creative aspects of music; c) to provide the essential background in professional and allied subjects for the student who chooses to teach music or follow some related career; and d) to provide students in other departments with elective courses in music designed to add cultural value and enjoyment to the general liberal arts program.

Course leading to the A.B. degree with music as the major: Students who take music as the major will modify the regular program for the first two years in order to begin music their first year. They normally will take English 1, 2, a foreign language, Music 11-12 and 14-15, and mathematics or Latin or Greek. Courses in the regular freshman program postponed to make way for the music courses are taken at some later time. Similar arrangements will be made in the sophomore year to provide for Music 31-32, 44-45, and 47-48.

The undergraduate major in music consists of from eighteen to twenty-four semester hours beyond the freshman-sophomore requirements and includes Music 48, 61, 64, 71, 74, and 101. Attention is called to the special requirements in applied music as stated on pages 293-94.

Course leading to the A.B. in Education degree with music as the major: Candidates for the A.B. degree in liberal arts with music as the major may qualify for state certification in public school music by taking certain additional courses in general education and music education. These courses ordinarily require one additional semester of work, or one summer of work during the four years. As an alternative the student may qualify for state certification in the usual eight semesters by taking an A.B. in Education (see pages 137-143) with music as the major. In either case, requirements for the major are the same. At the beginning of the junior year the student must decide whether he will elect the A.B. or the A.B. in Education program. Individual requirements in the curriculum are worked out in conference with the student's advisers in music and in education.

Honors in Music: Students interested in becoming candidates for the A.B. degree with honors in music should read the general regulations governing the honors program in the Division of Humanities and should consult the chairman of the Department of Music for specific modifications of this program as applied to music.

Course leading to the B.M. degree: The department offers the B.M. degree to students meeting the applied music requirements in conformity with the National Association of Schools of Music. This degree is awarded in conjunction with or after the A.B. degree in a five-year program. Students must satisfy the requirements for this degree by giving such public recitals and by passing such examinations as may be specified by the department. Students interested in this degree should apply to the Department of Music for particulars.

Courses for Undergraduates

*4. FUNDAMENTALS OF MUSIC FOR ELEMENTARY TEACHERS (3).

A basic music course for prospective classroom teachers other than music majors. Includes rudiments of music, the child voice, vocal and instrumental materials, rhythm band and simple melody instruments, and observation.

One lecture hour and four laboratory hours a week, fall and spring. Laboratory fee, $1.00. Mr. Carter.

11-12. NOTATION, SIGHT-SINGING, AND DICTATION (1½ each). No prerequisite.

An introductory course, intended to provide a working knowledge of rhythms, intervals, scales, and the common terminology of music, with attention to styles and literature.

Three laboratory hours a week, fall and spring. Mr. Alden.

14-15. HARMONY (3 each). Prerequisite or corequisite, Music 11-12.

A first course in the elements of musical composition, including triads, inversions, seventh chords, dominant dissonances, nonharmonic tones, modulation, keyboard harmony, and short compositions.

Fall and spring. Mr. Alden.

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* Not offered to music majors.

31-32. NOTATION, SIGHT-SINGING, AND DICTATION (1 each). Prerequisite, Music 11-12. Continuation of Music 11-12, with work in clef-reading, rhythm, intervals, chords, and melodies, utilizing practical exercises from musical literature.

Two laboratory hours a week, fall and spring. Mr. Mason.

*41. MUSIC APPRECIATION (3). No prerequisite.

An introduction to musical understanding, emphasizing elements, styles, and forms. Intergrated with the other arts and the humanities in general. Lectures, readings, recordings, and concerts.

Fall and spring. Fee, $1.00. Mr. Newman.

44-45. ADVANCED HARMONY (3 each). Prerequisites, Music 11-12, Music 14-15, corequisite 31-32.

A continuation of Music 14-15, including chromatic harmony, advanced modulation, and newer harmonic resources.

Fall and spring. Messrs. Schinhan, Mason.

47, 48. THE HISTORY OF MUSIC (3 each).

Survey from the origins to 1600, and from 1600 to the present. Includes readings, individual reports, films, recordings, and demonstrations in the various style periods.

Fall and spring. Mr. Mason.

*55. MUSIC APPRECIATION: OPERA AND ORATORIO (3). No prerequisite.

An introductory course for the layman, centered around opera and oratorio in local concerts, current radio and television programs, and new record releases.

Fall. Fee, $1.00. Mr. Alden.

*56. MUSIC APPRECIATION: SYMPHONY AND CHAMBER MUSIC (3). No prerequisite.

An introductory course for the layman, based on the styles and literature of instrumental music from Haydn to the present day. Illustrated through concerts, radio, television and recent recordings.

Spring. Fee, $1.00. Mr. Alden.

61. MODAL COUNTERPOINT IN THE SIXTEENTH-CENTURY STYLE (3). Prerequisite, Music 14-15.

Study and practice of vocal contrapuntal technique of the sixteenth century, with exercises in the five species and composition of simple motets.

Fall. Mr. Schinhan.

64. TONAL COUNTERPOINT (3). Prerequisite, Music 14-15.

Study and practice of 18th-century contrapuntal technique, with particular reference to the style of Bach. Writing of two- and three-part inventions.

Fall. Mr. Slocum.

71. ORCHESTRATION AND ELEMENTARY CONDUCTING (3). Prerequisite, Music 44-45.

The study of instrumental ranges and techniques. Arranging for orchestra, band and other instrumental ensembles. Practical experience in baton technique.

Fall. Mr. Slocum.

* Not offered to music majors.

74. ANALYSIS AND COMPOSITION IN THE SMALLER FORMS (3). Prerequisite, Music 44-45.

Examination of representative Classic and Romantic works. Practical experience in the writing of binary, ternary, and rondo forms.

Spring. Mr. Slocum.

Attention is called to the Music Education courses listed on page 247 in this catalog as Education 75, 76, 78, 79.

Courses for Graduates and Advanced Undergraduates

101, 102. INTRODUCTION TO MUSICOLOGY (3 each). Prerequisites, one foreign language and some proficiency in musical theory and performance. 101 includes especially acoustics, psychology and aesthetics in music. 102 emphasizes theories of music theory, pedagogy, comparative musicology, and music history. Musical bibliography is stressed in both courses.

Spring and fall. Mr. Haydon.

104. FOLK MUSIC (3).

Comparative study of the folksongs of European nations and the United States (especially the Southern Regions). Lectures, readings, and the study of printed or recorded music.

Fall. Mr. Schinhan.

121, 122, 123. STUDIES IN THE HISTORY OF MUSIC (3 each.) Prerequisites, Music 45, 47, and 48. Investigation of a particular aspect or phase of music history such as opera, performance practices, Ravel and Debussy, or the Baroque era.

121, *fall;* 122, 123, *spring.* Mr. Newman.

Courses for Graduates

201. SPECIAL STUDIES.

The department is ready to assist and advise competent graduate students who may propose plans for either research or creative work which meet with its approval.

Hours and credit to be arranged. Staff.

*204. INTRODUCTION TO COMPARATIVE MUSICOLOGY (3). Prerequisites, Music 101-102; a reading knowledge of one or more foreign languages, preferably German, French or Spanish; and permission of the instructor.

Methodology used in the study of the musical language of primitive cultures including the American Indians.

Spring. Mr. Schinhan.

214. APPLIED HARMONY (3).

The logic of chordal progressions as applied to musical compositions.

Fall. Mr. Schinhan.

261. ADVANCED MODAL COUNTERPOINT IN THE SIXTEENTH-CENTURY STYLE (3).

A study of the vocal works of Palestrina, Lassus, and other sixteenth-century composers, with practical exercises in the composition of motets and masses.

Fall. Mr. Mason.

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* Will be given as demand warrants.

264. ADVANCED TONAL COUNTERPOINT (3).
A study of canon and fugue, with special emphasis on the works of Bach. Includes practical exercises in these forms.
Fall. Mr. Slocum.

271. ADVANCED ORCHESTRATION (3). Prerequisites, Music 214, 261, 264.
Spring. Mr. Slocum.

274. ADVANCED COMPOSITION (3). Prerequisites, Music 214, 261, 264.
Spring. Mr. Schinhan.

299. THESIS.
Either semester. Staff.

301, 302, 303. SEMINAR IN MUSICOLOGY (3 each).
Research, both historical and systematic, as applied to a specific era, style, form, composer, or other branch of musical knowledge.
301, 303, *fall;* 302, *spring.* Mr. Haydon.

Applied Music

The following courses in applied music are open to students in any department of the University having the necessary musical and technical background. The work in applied music is regarded not merely as technical training in performance, but also as a study of the standard literature for the particular instrument or ensemble group. Credit in general will be given on the basis of (1) the stage of advancement and (2) the number of lessons and hours of practice a week. Credits to meet the requirements for high school teachers' certificates will be reckoned on the basis of 1½ semester hours for one lesson a week for the semester. For those whose major is not music a total credit not to exceed six semester hours may be counted as electives in the A.B. curriculum. Those whose major is music must offer at least eight semester hours in applied music and may offer a total not to exceed sixteen semester hours in this field, of which not more than eight may be ensemble courses. All students with majors in music, unless given special permission by the chairman of the department, must continue individual instruction in applied music throughout the four years. Students planning to teach instrumental music in the public schools will arrange their schedules for the study of the wind and stringed instruments in consultation with the department.

The general prerequisite work for entrance into the first-year courses is ability to perform music of difficulty rated as grade three for the particular instrument. Copies of the course of study for each instrument will be sent upon request. Students who do not have this prerequisite will repeat the preparation course without credit until they qualify for the freshman course. The candidate for the A.B. degree with a major in music must complete as a minimum the freshman course in his chosen field of applied music. Students electing

some instrument other than piano for their work in applied music must demonstrate sufficient pianistic ability to enable them to meet the practical requirements of the course to be pursued. This is interpreted to mean the ability to play at sight hymns or compositions of similar difficulty.

Students majoring in music for an undergraduate degree will be required to participate in the musical organizations of the department, take part in prescribed concerts, and attend the weekly student recitals.

FEES

Fees for individual instruction are: $33.75 per semester for one lesson a week; $67.50 per semester for two lessons a week. Fee for one daily practice period (room with piano), $5.50 per semester; fee for two hours daily practice, $9.50 per semester. Other fees in proportion. Fee for six hours practice a week on Reuter four-manual organ, $28.25 per semester; on Allen or Reuter practice organ, $22.50 per semester; on Estey practice organ, $11.25 per semester. Arrangements for applied music are made in the office of the Department of Music.

INDIVIDUAL INSTRUCTION

A. PREPARATORY ORGAN (no credit).
One or two half-hour lessons and six or twelve hours of practice a week, every semester. Messrs. Schinhan, Weaver.

1A-2A. FIRST-YEAR ORGAN (½ or 1). Prerequisite, ability to play music for a keyboard instrument of the difficulty of Heller, Op. 45, 46, 47; Bach, Two-Part Inventions; scales and arpeggios in moderate tempo; simple hymns (at sight).
Value, one-half or one semester hour, respectively, for one or two lessons and six or twelve hours of practice a week. Mr. Schinhan.

21A-22A. SECOND-YEAR ORGAN (½ or 1). Prerequisite, Music 1A-2A.
Value and hours as in 1A-2A. Mr. Schinhan.

51A-52A. THIRD-YEAR ORGAN (½ or 1). Prerequisite, Music 21A-22A.
Value and hours as in 1A-2A. Mr. Schinhan.

81A-82A. FOURTH-YEAR ORGAN (½ or 1). Prerequisite, Music 51A-52A.
Value and hours as in 1A-2A. Mr. Schinhan.

91A-92A. FIFTH-YEAR ORGAN (3 each). Prerequisite, Music 81A-82A. Required of candidates for the B.M. degree.
Similar numbering and description with regard to value, hours and prerequisite work apply to each of the courses B, C, D, and E.

B. PIANO. Messrs. Schinhan, Newman, Mason, Weaver, Bernstein, Misses Sites, Pibernik.

C. VOICE. Messrs. Carter, Strassler.

D. VIOLIN OR OTHER STRINGED INSTRUMENT. Mr. Alden, Miss Clarke.

E. FLUTE OR OTHER BAND OR ORCHESTRAL INSTRUMENT. Messrs. Haydon, Slocum, Fred.

CLASS INSTRUCTION

For students desiring to complete the general piano requirements, for those in the general instrumental course, and for those wishing special training in voice, class instruction will be offered as far as practicable. Applications for admission to any of these classes should be made at the office of the Department of Music as soon after registration as possible. Hours to be arranged.

ENSEMBLE GROUPS

1F-2F. FIRST-YEAR BAND (½ each). Prerequisite, approval of instructor based upon a try-out given at the beginning of each semester.
A minimum of two hours a week through one semester. Messrs. Slocum, Fred.

21F-22F. SECOND-YEAR BAND (½ each).
Value and hours as in 1F-2F. Messrs. Slocum, Fred.

51F-52F. THIRD-YEAR BAND (½ each).
Value and hours as in 1F-2F. Messrs. Slocum, Fred.

81F-82F. FOURTH-YEAR BAND (½ each).
Value and hours as in 1F-2F. Messrs. Slocum, Fred.

Similar numbering, prerequisite work, value, and hours apply to each of the following courses in applied music:

G. ORCHESTRA. Messrs. Slocum, Alden.

H. GLEE CLUB. Mr. Carter.

I. PIANO ENSEMBLE OR OTHER INSTRUMENTAL ENSEMBLE. Staff.

DEPARTMENT OF NAVAL SCIENCE

Professor: R. C. BURNS, *Colonel, USMC*
Associate Professor: F. L. EDWARDS, *Commander, USN*
Assistant Professors: T. R. WHEATLEY, *Commander, USN;* A. H. JOSSELYN, *Lieutenant, Supply Corps, USN;* G. F. GOOD, *Captain, USMC;* C. R. WICK, *Lieutenant, USN;* W. E. HILDEBRANDT, *Lieutenant (junior grade), USN*

General Statement

The purpose of the Naval Reserve Officers Training Corps is to provide a steady supply of well-educated junior officers for the Line and Staff Corps of the Navy and Marine Corps, and to build up a reserve of trained officers who will be ready to serve the country at a moment's notice in a national emergency. Students enrolled in the N.R.O.T.C. are of two categories—*regular* and *contract*. All procedures, benefits and requirements described hereinafter apply to both categories of N.R.O.T.C. students unless specifically indicated as pertaining to only one of the two types.

University Status

The Naval R.O.T.C. Unit is a recognized department of instruction within the University (Department of Naval Science). Full credit toward degrees is granted Naval Science courses as in other departments.

Military Status

N.R.O.T.C. students wear the uniform only on such occasions as prescribed by the Professor of Naval Science. Normally, this will be at drills, ceremonies, and on cruises. In addition to the ordinary requirements of gentlemanly conduct, they are subject to naval discipline and must conduct themselves at all times in a military manner when under naval jurisdiction, that is, when attending naval science classes, drills and exercises, and during summer training periods.

With the exception of the above described instances, N.R.O.T.C. students are in the same category as other students of the University.

Status on Graduation

Contract students: After completion of their academic requirements for a baccalaureate degree and the four years of Naval rquirements, which include the summer training, contract students are commissioned as ensigns in the U. S. Naval Reserve or second lieutenants in the U. S. Marine Corps Reserve. They are eligible for call to active duty as indicated below under "Draft Deferment."

Regular students: Upon graduation, regular students are commissioned as ensigns in the U. S. Navy or second lieutenants in the U. S. Marine Corps. They are normally required to serve on active duty for a maximum period of three years. At the end of this period they may request to remain on active duty as career officers. If they do not so request, or if not selected, they are released to an inactive status in the Reserve.

Summer Training

Regular students: All regular students are required to take two summer cruises and one summer period of aviation-amphibious indoctrination, usually of eight weeks' duration each. The cruises are made on board modern warships. The aviation indoctrination is usually conducted at Corpus Christi, Texas, and the amphibious indoctrination is usually conducted at Little Creek, Virginia.

Contract students: Contract students are required to take only one summer cruise during the summer between their junior and senior years, the cruise being of approximately six weeks' duration.

Travel expenses for both regular and contract students from the University to the summer training site and return are furnished by

the government. In addition, all students receive active duty pay during summer training amounting to approximately $75.00 per month.

Emoluments

Regular students: For regular students the cost of tuition, fees, and textbooks is paid by the government. Necessary uniforms are provided and students receive retainer pay at the rate of $600 per year.

Contract students: Contract students receive no emoluments during the first two years in the program. During the last two years they receive a subsistence allowance which amounts to approximately $27.00 a month. They are issued the necessary uniforms and Naval Science textbooks at no expense.

Eligibility Requirements

A candidate for the N.R.O.T.C. must:

1. Be a male citizen of the United States.
2. At the time of his enrollment, if a minor, have the consent of his parent or guardian.
3. Be not less than seventeen nor more than twenty-one years of age on July 1 of the year in which he enters the program.
4. Gain his own admittance to the University.
5. Agree to remain unmarried until commissioned.
6. Enter into a contract with the Secretary of the Navy, agreeing to accept a commission, if offered.
7. Be physically qualified, in accordance with the requirements for the U. S. Naval Academy.
8. If a contract student, agree to serve two years on active duty upon completion of college training, if called by the Secretary of the Navy.
9. If a regular student, agree to accept a commission, if offered, and to serve for three years as an ensign, U. S. Navy, or second lieutenant, U. S. Marine Corps.

Special Procedures

Contract students are enrolled by the Professor of Naval Science upon their own application and are subject to selection and physical examination at the University within a limited quota as assigned by the Navy Department to each University. These students are taken primarily from the entering freshman class at the beginning of the fall semester.

Inasmuch as the selection of contract students is completed during the first week of the fall semester and in view of the fact that the contract quota is limited, all students who desire to be considered for the N.R.O.T.C. program should apply previous to the first day of classes

in the fall. An application is not binding, and, even after enrollment in the program, a contract student may withdraw from the program, without prejudice, upon his own request at any time within the first two years.

Regular students enter the N.R.O.T.C. through a nation-wide Aptitude-for-Learning test and selection system conducted by the College Entrance Examining Board, Princeton, New Jersey, and the Navy Department, respectively. The competitive examination is conducted in the late fall of the year, approximately nine months before enrollment of the applicant.

Transfer from contract to regular status: Contract N.R.O.T.C. students may compete for regular status and if selected will be enrolled as regular students without loss of standing.

Draft Deferment

A student enrolled in the Naval R.O.T.C. will be deferred from the draft (Selective Service of 1948 and Universal Military Training Act of 1951) if:

1. He pursues the Naval R.O.T.C. course for four full years, including the summer training period applicable to his status as a contract or regular student.

2. As a contract student, he signs an agreement to accept a commission, if tendered, to retain this commission for a period of eight years and to serve not less than two years on active duty as an officer, if called by the Secretary of the Navy.

3. As a regular student, he signs an agreement to accept a commission, if tendered, to retain this commission for a period of eight years and to serve not less than three years on active duty as an officer, if called by the Secretary of the Navy.

Curricula

General: In order to obtain a commission either in the U. S. Navy, U. S. Naval Reserve, U. S. Marine Corps, or U. S. Marine Corps Reserve, students are required to obtain a baccalaureate degree and complete twenty-four semester hours in the Department of Naval Science. During each semester every student is required to attend two laboratory periods of one hour's duration each week. By the end of the sophomore year every student must have satisfactorily completed one year of mathematics through trigonometry. In addition, each regular student must complete one year of college physics. Every student must achieve proficiency in written and oral expression in accordance with the standards of proficiency set by the University. Three separate curricula in naval science subjects are offered, leading to com-

missions in the Line of the Navy, the Supply Corps of the Navy and the Marine Corps.

N. S. 101. NAVAL ORIENTATION (3).
Naval history and orientation.
Three lecture and two laboratory hours a week, fall.

N. S. 102. NAVAL ORIENTATION (3).
Naval history and orientation.
Three lecture and two laboratory hours a week, spring.

N. S. 201. NAVAL WEAPONS (3).
Naval ordnance and control of gunfire.
Three lecture and two laboratory hours a week, fall.

N. S. 202. NAVAL WEAPONS (3).
Control of gunfire and electronics.
Three lecture and two laboratory hours a week, spring.

N. S. 301. NAVAL ENGINEERING (3).
Naval engineering, naval engineering installations and diesel engines.
Three lecture and two laboratory hours a week, fall.

N. S. 302. NAVIGATION (3).
Nautical astronomy, celestial navigation, navigator's day's work at sea.
Three lecture and two laboratory hours a week, spring.

N. S. 301M. EVOLUTION OF THE ART OF WAR (3).
Evolution of the Art of War from Alexander through Korea. (For Marine Officer Candidates.)
Three lecture and two laboratory hours a week, fall.

N. S. 302M. MODERN BASIC STRATEGY AND TACTICS (3).
The survey of modern strategical and tactical principles, using contemporary historical events as illustrative material. (For Marine Officer Candidates.)
Three lecture and two laboratory hours a week, spring.

N. S. 301S. NAVAL SUPPLY (3).
Introduction to the Supply Corps, Logistics, Naval Supply system, Supply ashore, Naval finance, and accounting. (For Navy Supply Officer Candidates.)
Three lecture and two laboratory hours a week, fall.

N. S. 302S. NAVAL SUPPLY (3).
Basic and intermediate supply afloat. (For Navy Supply Officer Candidates.)
Three lecture and two laboratory hours a week, spring.

N. S. 401. NAVAL ADMINISTRATION (3).
Principles of personnel management, the elements of military law, and those areas of personal relations pertinent to the Naval Service.
Three lecture and two laboratory hours a week, fall.

N. S. 402. NAVAL ENGINEERING (3).
Naval engineering, naval engineering installations and diesel engines.
Three lecture and two laboratory hours a week, spring.

N. S. 401M. AMPHIBIOUS WARFARE (3).
History of amphibious warfare, development of principles of amphibious warfare. (For Marine Officer Candidates.)
Three lecture and two laboratory hours a week, fall.

N. S. 402M. AMPHIBIOUS WARFARE, MILITARY JUSTICE AND LEADERSHIP (3).

Application of the principles of amphibious warfare in selected examples in modern history. Principles and procedure in administering military law. Principles of military leadership. (For Marine Officer Candidates.)

Three lecture and two laboratory hours a week, spring.

N. S. 401S. NAVAL SUPPLY (3).

Advanced supply afloat, ship's store, and clothing and small stores. (For Navy Supply Officer Candidates.)

Three lecture and two laboratory hours a week, fall.

N. S. 402S. NAVAL SUPPLY (3).

Commissary, Naval Justice, and Leadership. (For Navy Supply Officer Candidates.)

Three lecture and two laboratory hours a week, spring.

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*DEPARTMENT OF PATHOLOGY

Professors: K. M. BRINKHOUS, †J. B. BULLITT
Visiting Professor: H. Z. LUND
Associate Professor: J. B. GRAHAM
Assistant Professors: W. E. LORING, G. D. PENICK, MARGARET C. SWANTON
Instructors: JUNE U. GUNTER, *Director of Watts Hospital Laboratories,* R. D. LANGDELL, G. P. VENNART
Research Associate: R. H. WAGNER
Fellows: W. D. ATCHISON, MITIYUKI SHIMIZU
Residents: D. F. BEALS, L. W. OEHLBECK, JR.
Assistant Resident: S. G. WILSON
Student Assistant: J. G. MCALLISTER, III

Course for Undergraduates

52. CLINICAL PATHOLOGY (3). Prerequisites, general chemistry and one course in zoology.

A course designed to give undergraduate students an introduction to hematology, urinalysis, and some of the other technical procedures commonly employed in hospital and biological research laboratories.

One lecture and four laboratory hours a week, spring semester. Drs. Beals and Oehlbeck.

Courses for Graduates and Advanced Undergraduates

161ab. PATHOLOGY (12 2/3). Prerequisites, anatomy, histology, physiology, biochemistry.

Four lecture and eleven laboratory hours a week, fall and winter quarters. Staff.

162 (I). SURGICAL PATHOLOGY. Prerequisite, Pathology 161.

A detailed study of surgical material, with special reference to tumors.

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* This is also a department in the School of Medicine which operates on the quarter system. Therefore, some of its courses are taught by the quarter. The credit in parentheses after the course title is in semester hours.

† Professor Emeritus.

162 (II). EXPERIMENTAL PATHOLOGY. Prerequisites, physiology and biochemistry.

Production of various inflammatory lesions and other pathological processes (edema, hemorrhage, ischemia, jaundice, urinary obstruction, etc.), and study of their development.

162 (III). RESEARCH IN PATHOLOGY. Prerequisites, physiology and biochemistry.

NOTE: Hours, credits, and instructor for courses 162 (I, II, III) to be arranged.

170. SYSTEMIC AND CLINICAL PATHOLOGY (3 2/3). Prerequisite, Pathology 161a. Designed for dental students.

Three lecture and five laboratory hours a week, winter quarter. Staff.

Courses for Graduates

211. SURGICAL PATHOLOGY (3 1/3). Prerequisite, Pathology 161ab.

Two conference and six laboratory hours a week, fall, winter, spring, and summer quarters. Staff.

212. AUTOPSY PATHOLOGY (3 1/3). Prerequisite, Pathology 161ab.

Two conference and six laboratory hours a week, fall, winter, spring, and summer quarters. Staff.

301. SEMINAR IN PATHOLOGY (2). Prerequisite, Pathology 161ab.

Three hours a week, fall, winter, spring, and summer quarters. Staff.

302, 303, 304. RESEARCH IN PATHOLOGY (3 1/3 or more each). Prerequisite, permission of the department.

Ten laboratory hours a week, fall, winter, spring, and summer quarters. Staff.

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*DEPARTMENT OF PHARMACOLOGY

Professor: T. C. BUTLER
Associate Professor: F. W. ELLIS
Assistant Professors: T. Z. CSAKY, J. B. HILL
Technical Assistant: L. T. COLIE

Course for Undergraduates

55. PHARMACOLOGY (3½). Prerequisites, Physiology 51, Materia Medica 68-69. A course for pharmacy students.

Four lecture and six laboratory hours a week, last eight weeks of spring semester. Laboratory fee, $5.00. Staff.

Courses for Graduates

134. PHARMACOLOGY (3 2/3). A course for second-year students of dentistry.

Four lecture and three laboratory hours a week, winter quarter. Staff.

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* This is also a department in the School of Medicine which operates on the quarter system. Therefore, some of its courses are taught by the quarter. The credit in parentheses after the course title is in semester hours.

171. PHARMACOLOGY (7 1/3). Prerequisites, anatomy, physiology, biochemistry. A course for second-year medical students.

Eight lecture and six laboratory hours a week, spring quarter. Laboratory fee for non-medical students, $15.00. Staff.

In addition to the regularly scheduled courses, the department can by special arrangement offer facilities for research to a small number of students or graduates in medicine.

DEPARTMENT OF PHILOSOPHY

Professors: E. W. HALL, L. O. KATTSOFF, S. A. EMERY
Associate Professor: E. M. ADAMS
Assistant Professors: W. H. POTEAT, J. L. SAUNDERS
Instructor: S. C. COVAL

The Department of Philosophy is a member of each division of the College of Arts and Sciences. Accordingly, an undergraduate student planning a major in philosophy will elect this department as in one of these divisions and will be governed by the rules of that division regarding the distribution of his work among departmental, divisional, and non-divisional courses. Each student will decide his junior and senior program in consultation with his adviser. Courses 56, 58, 101 and 102 are recommended for all undergraduate majors and are prerequisites for any graduate major program in philosophy. For General College students who are considering a major in philosophy the introductory courses, 21, 22, and 41, are recommended. For all students not intending to major in philosophy, 21 is recommended as giving training in the principles of logical thought, 22 as introducing students to philosophical methods in the area of moral problems, and 41 and 42 as offering acquaintance with the subject matter of philosophy.

Prospective candidates for advanced degrees in philosophy should consult the Graduate School catalogue or the section in the present catalogue headed "The Graduate School" for general requirements. The Department of Philosophy specifically requires three courses under *D* below or their equivalent of all candidates for the Master's Degree and courses 150, 151, 153, 154, 155 and either 158 or 159 or their equivalents of all candidates for the doctor's degree.

Courses for Undergraduates

A. SYSTEMATIC COURSES

21. INTRODUCTORY LOGIC (3).

A study of the fundamental principles of logical thought as a basis for rational belief and intelligent action. Linguistic obstacles to clear and straight thinking; standards of valid reasoning, methods of inquiry.

Each semester. Staff.

22. INTRODUCTORY ETHICS (3).
An examination of the ethical systems of Western civilization; their relevance to the goals of human life and the means of attaining them; the problem of current ethical skepticism.
Each semester. Staff.

41. INTRODUCTION TO PHILOSOPHY: THE FIELDS OF PHILOSOPHY (3).
A survey of the chief philosophic fields, their interrelations and typical problems.
Each semester. Staff.

42. INTRODUCTION TO PHILOSOPHY: THE DEVELOPMENT OF PHILOSOPHY (3).
An introduction to philosophic inquiry through a program of readings from those thinkers who have most profoundly affected the Western mind.
Each semester. Staff.

51. INTRODUCTION TO THE PHILOSOPHY OF THE STATE (3).
A philosophical examination of the fundamental principles pertaining to rights of individuals, authority of society and government, political obligation, and nature and foundation of law in democratic liberalism, fascism, and communism.
Fall. Mr. Adams or Mr. Poteat.

52. INTRODUCTION TO THE PHILOSOPHY OF RELIGION (3).
Analysis of elements of religious thought and practice with reference to chief philosophers from Descartes through Dewey. Problems of knowledge and faith; the existence and nature of God.
Each semester. Mr. Poteat.

B. Historical Courses

56. ANCIENT PHILOSOPHY (3). No prerequisite.
The development of Western philosophic thought from its inception with the early Greeks to the Hellenistic period. An examination of the writings of the Presocratics, Plato, Aristotle, Epicureanism, Stoicism, Neoplatonism, and Greek Skepticism.
Fall. Mr. Saunders.

57. MEDIEVAL PHILOSOPHY (3). Recommended that this be preceded by Philosophy 56.
Continuation of the development of the Western philosophical tradition. Representative writings of Greek Gnosticism and the rise of the Latin Western Christian tradition. Clement of Alexandria, Tertullian, Augustine, Erigena, Anselm, Arabian and Jewish influences, Bonaventure, Thomas Aquinas.
(1955-1956 and alternate years.) *Spring.* Mr. Saunders.

58. MODERN PHILOSOPHY (3). No prerequisite.
The development of philosophic thought from the Renaissance to the nineteenth century. Chief emphasis on the seventeenth and eighteenth centuries.
Fall. Mr. Emery.

59. NINETEENTH AND TWENTIETH CENTURY PHILOSOPHY (3). Recommended that this be preceded by Philosophy 58.
The development of philosophic thought from the early nineteenth century to the present.
(1955-1956 and alternate years.) *Spring.* Mr. Emery.

99. DIRECTED READINGS (3).
Under special circumstances, and with the consent of the department chairman, an undergraduate student with adequate background in the subject may register for individual reading in the subject. May not be repeated.
Each semester. Staff.

100a, 100b. COURSES FOR HONORS (3 each).
See the programs for Honors work in the Division of the Humanities and the Division of the Social Sciences.

Courses for Graduates and Advanced Undergraduates

C. SYSTEMATIC COURSES

(Prerequisite, one course under *A* or *B*, or consent of instructor.)

101. SYMBOLIC LOGIC (3). Recommended that this be preceded by Philosophy 21.
The symbolic approach to the logic of classes, propositions, propositional functions, and the nature of implication.
Spring. Mr. Kattsoff.

102. ETHICS (3). Recommended that this be preceded by Philosophy 22.
Important tendencies in ethical thought critically examined; special emphasis on social applications.
Spring. Mr. Hall or Mr. Adams.

103. AESTHETICS (3).
A critical survey of some of the aesthetic theories with illustrative application in the various fields of art.
Spring. Mr. Hall.

104. PHILOSOPHY IN LITERATURE (3).
An examination of some of the perennial problems of philosophy (the nature of man, evil, freedom, tragedy) as found in literary classics.
Fall. Mr. Poteat.

105. SURVEY OF SOCIAL AND POLITICAL PHILOSOPHY (3).
An examination of the basic concepts of political philosophy such as the state, law, right, power, authority, in relation to metaphysics and ethics.
(1954-1955 and alternate years.) Mr. Adams or Mr. Poteat.

106. PHILOSOPHY OF MATHEMATICS (3). Prerequisite, several courses in college mathematics or Philosophy 101.
A consideration of the major schools of thought on the problems connected with the foundation of mathematics. The solutions of Formalism, Intuition, and Logistics to such questions as the definition of number, the paradoxes, etc., will be studied, along with their metaphysical implications.
(1955-1956 and alternate years.) *Fall.* Mr. Kattsoff.

107. FOUNDATIONS OF THE SOCIAL SCIENCES (Sociology 107) (3). Recommended that this be preceded by Philosophy 22 and one course in psychology or sociology.
An attempt to establish an approach to the social sciences based on the notion of purposive behavior. The course seeks to construct a theoretical framework for a modern social science and a possible science of man.
(1955-1956 and alternate years.) *Spring.* Mr. Kattsoff.

108. FOUNDATIONS OF THE NATURAL SCIENCES (3). Recommended that this be preceded by Philosophy 21.

Reason and Nature. Scientific method. The concepts of physics, biology, and psychology. The implications of contemporary science for the nature of reality, religion and man.

(1954-1955 and alternate years.) Mr. Kattsoff.

D. HISTORICAL COURSES

(Prerequisite, one course under *B* or consent of instructor.)

150. PLATO (3).

An examination of some representative works of Plato, with reference to common emphases and basic problems, together with an analysis of their philosophic content.

(1955-1956 and alternate years.) *Fall.* Mr. Saunders.

151. ARISTOTLE (3).

An examination of some representative works of Aristotle, with reference to common emphases and basic problems, together with an analysis of their philosophic content.

(1956-1957 and alternate years.) *Fall.* Mr. Saunders.

152. AUGUSTINE AND AQUINAS (3).

A study of the philosophy of Augustine and Aquinas; their theories of God, Nature, Man and the State; their significance for modern man.

(1954-1955 and alternate years.) *Spring.* Mr. Saunders.

153. CONTINENTAL RATIONALISM (3).

The metaphysical systems of Descartes, Spinoza, and Leibniz as seventeenth century attempts to reconcile the medieval tradition and the early developments of modern natural science.

(1955-1956 and alternate years.) *Fall.* Mr. Emery.

154. BRITISH EMPIRICISM (3).

An epistemological study of Locke, Berkeley, and Hume.

(1954-1955 and alternate years.) Mr. Emery.

155. KANT (3).

A study of Kant's critical philosophy as rooted in eighteenth-century rationalism and empiricism and as initiating German idealism.

(1954-1955 and alternate years.) Mr. Adams or Mr. Emery.

156. HEGEL (3).

Hegel's Absolute Idealism: its roots in Kant's critical philosophy and its influence on subsequent thought in Europe and America.

(1955-1956 and alternate years.) *Spring.* Mr. Emery or Mr. Kattsoff.

158. RECENT AND CONTEMPORARY PHILOSOPHY (3).

Analysis of a few outstanding works in recent philosophy as illustrative of major movements of thought.

(1955-1956 and alternate years.) *Fall.* Mr. Hall.

159. AMERICAN PHILOSOPHY (3).

The emergence of systematic American philosophy from its matrix in earlier theological, social, and literary thought. Chief emphasis on the late nineteenth and early twentieth centuries.

(1954-1955 and alternate years.) Mr. Emery or Mr. Kattsoff.

160. PHILOSOPHICAL LITERATURE OF THE RENAISSANCE (3).
A study of the philosophical and intellectual currents of the Renaissance, with reference to the origins and development of classical humanism and medieval scholasticism and the emergence of a Renaissance philosophy of man.
(1955-1956 and alternate years.) *Spring.* Mr. Saunders.

Courses for Graduates

E. Systematic Courses

201. LOGIC (3).
Special topics in both modern and classical logic will be considered, such as the logic of modality, the logic of probability, the nature of inference, etc.
(Not offered in 1954-1955.) Mr. Kattsoff.

203. METAPHYSICS (3).
A systematic study of metaphysical problems.
(1955-1956 and alternate years.) *Fall.* Mr. Kattsoff or Mr. Hall.

204. EPISTEMOLOGY (3).
A systematic study of epistemological problems.
(1954-1955 and alternate years.) Mr. Adams or Mr. Hall.

205. VALUE THEORY (3).
A systematic study of problems in value theory.
(1954-1955 and alternate years.) *Spring.* Mr. Adams or Mr. Hall.

208. PHILOSOPHY OF RELIGION (3).
A systematic study of problems in the philosophy of religion.
(1954-1955 and alternate years.) Mr. Poteat.

F. Seminars and Special

300. STUDIES IN ANCIENT AND MEDIEVAL PHILOSOPHY (3).
An examination of typical problems and philosophic issues found in the study of classical and medieval authors. Choice is made, consistent with the interests of students, from a wide range of problems, such as: the origin and development of Greek philosophical concepts; a study of the philosophic schools from the beginning of Stoicism, Epicureanism, Skepticism, down to the end of the neoplatonic school; or medieval thought from Boethius to Aquinas. May be repeated for credit.
(1956-1957 and alternate years.) *Spring.* Mr. Saunders.

304. SEMINAR IN THE HISTORY OF PHILOSOPHY (3). May be repeated for credit.
Each semester. Staff.

305. SEMINAR IN SYSTEMATIC PHILOSOPHY (3). May be repeated for credit.
Each semester. Staff.

311. READINGS IN PHILOSOPHY (3). May be repeated for credit.
Each semester. Staff.

312. THESIS (3).
Each semester. Staff.

DEPARTMENT OF PHYSICAL EDUCATION AND ATHLETICS

Chairman, Department of Physical Education: O. K. CORNWELL
Director of Athletics: C. P. ERICKSON
Professors: O. K. CORNWELL, R. E. JAMERSON, G. E. SHEPARD
Associate Professors: E. M. ALLEN, RUTH WHITE FINK, H. C. HOUSE, JR., C. E. MULLIS, W. H. PEACOCK, W. W. RABB
Assistant Professors: L. R. CASEY, RUTH PRICE, SAMUEL GILL BARNES, CARL BLYTH
Instructors: GEORGE BARCLAY, MARVIN BASS, STEPHEN N. BELICHICK, WILLIAM EDWARDS, RALPH FLOYD, BUNN HEARN, JOSEPH HILTON, MARY FRANCES KELLAM, J. F. KENFIELD, *FITZ LUTZ, FRANK MCGUIRE, WILLIAM MEADE, M. D. RANSOM, M. Z. RONMAN, HAMMOND STRAYHORN, R. A. WHITE
Part-time Instructors: FRANCES B. HOGAN, MARILYN CRAWFORD
Graduate Assistants: EARL EDWARD HOFFMAN, SAMUEL GEEK, JACK STONER LOWDER, CHARLES ISAAC ECKER, RAYMOND EDWIN BAUER, HARRY PAWLIK

The purpose of the work of the Department of Physical Education can be stated as follows: (1) to examine thoroughly each student and provide him with essential information concerning his health status; (2) to teach him the elements of personal hygiene and public health; (3) to give special attention by way of corrective exercises to all students with physical handicaps; (4) to teach outdoor sports and leisure time recreations to all students in line with their capacities and interests; (5) to provide the necessary training for teachers in the field of health and physical education and thus to help to meet the need in North Carolina for knowledge about individual and public health and to promote widespread participation in wholesome recreation.

Students who choose a major in health and physical education will take the following courses: Physical Education 75, 76, 77, 78, 79, 86, 87, 88. In addition men will take Physical Education 65, 66, 67; women will take Physical Education 55, 56, 57, 83a. For teacher certification in North Carolina both men and women will take Education 41, 71a, 71b, 99, 63, 64. Those who choose a minor will select fifteen hours of work from Physical Education 77, 78, 86, Education 63, and electives from Physical Education 65, 66, 67, for men, and Physical Education 55, 56, 57, for women.

All majors in health and physical education must have eight hours in biological science to satisfy certification standards in North Carolina.

Courses for Undergraduates

Hygiene 11. PERSONAL HYGIENE (2). Required of freshmen.
Two hours a week, fall or spring. Staff.

Hygiene 11W. PERSONAL HYGIENE (2). Required of freshmen women.
Two hours a week, fall. Miss Kellam.

* Died October 4, 1954.

Hygiene 12W. HYGIENE (2). For women.
Two hours a week, fall and spring. Miss Kellam.

1-2. PHYSICAL EDUCATION (1 each). Required of freshmen men.
Three hours a week, fall and spring. Staff.

3-4. PHYSICAL EDUCATION (1 each). Required of sophomore men.
Three hours a week, fall and spring. Staff.

21W, 22W. PHYSICAL EDUCATION (1 each). Required of freshmen women.
Two hours a week, fall and spring. Staff.

31W, 32W. PHYSICAL EDUCATION (1 each). Required of sophomore women.
Two hours a week, fall and spring. Staff.

41W, 42W. PHYSICAL EDUCATION (1 each). Required of junior women. (See 41E.)
Two hours a week, fall and spring. Staff.

41E, 42E. PHYSICAL EDUCATION (1 each). Required of all junior women majoring in elementary education.
Two hours a week, fall and spring. Staff.

For Women Who Are Majoring in Physical Education:

55. PHYSICAL EDUCATION (4).
Methods and materials in volleyball, hockey, soccer, speedball, basketball, swimming, badminton, and elementary school physical education activities.
Twelve laboratory hours a week, fall. Mrs. Hogan, Miss Kellam, Miss Crawford, Mrs. Fink.

56. PHYSICAL EDUCATION (4).
Methods and materials in folk, square, tap, social, and modern dance, recreational games, softball, and archery.
Twelve laboratory hours a week, spring. Miss Price, Miss Kellam, Mrs. Fink.

57. PHYSICAL EDUCATION (4).
Methods and materials in tennis, golf, track and field activities, stunts and tumbling, conditioning exercises, lifesaving, special events (field days, sport days, etc.), and camp counselorship.
Twelve laboratory hours a week, fall and spring. Mrs. Fink, Miss Kellam, Miss Crawford, Mrs. Hogan.

83a. PHYSICAL EDUCATION (2).
This course deals with selection of materials and the methods of teaching physical education in the elementary school. Required of elementary education majors.
Fall and spring. Miss Kellam.

For Men Who Are Majoring in Physical Education:

65. PHYSICAL EDUCATION (4).
Methods, materials, technics and skills in teaching and coaching baseball, soccer, speedball, volleyball, badminton, and basketball.
Twelve hours a week, fall. Messrs. Rabb, Allen, Jamerson, Strayhorn, Shepard.

66. PHYSICAL EDUCATION (4).
Methods, materials, technics and skills in teaching and coaching dancing, elementary games, corecreational games, wrestling, and tennis.
Twelve hours a week, spring. Messrs. Rabb, Peacock, Strayhorn, and Miss Price.

67. PHYSICAL EDUCATION (4).
Methods, materials, technics and skills in teaching and coaching swimming, golf, football, tumbling, and track.
Twelve hours a week, fall and spring. Messrs. Casey, Rabb, House, Meade and Ransom.

For All Undergraduate Majors in Physical Education:

75. ANATOMY (3).
This course is designed to teach the fundamentals of anatomy as they apply functionally to the area of health and physical education.
Fall and spring. Mr. Blyth.

76. PHYSIOLOGY (3). Prerequisite, Physical Education 75 or the equivalent of Zoology 41, 42.
A lecture course in elementary physiology covering the various systems of the body.
Fall and spring. Mr. Blyth.

77. PRINCIPLES OF PHYSICAL EDUCATION (2).
A study of the relationship and contribution of physical education to general education; historical backgrounds, basic biological, physiological, psychological, and sociological backgrounds of the modern program.
Fall and spring. Messrs. Shepard, House.

78. PERSONAL AND COMMUNITY HYGIENE (3).
The purpose of this course is to give the student an understanding of the principles and problems of personal, school, and community health as they apply to everyday living.
Fall and spring. Mr. Mullis.

79. TESTS AND MEASUREMENTS IN PHYSICAL EDUCATION (2).
This course is designed to acquaint students with tests and measurements in the fields of health and physical education, test construction, scoring and methods of using results.
Fall and spring. Mr. Peacock.

83a. PHYSICAL EDUCATION FOR THE ELEMENTARY SCHOOL (3).
This course deals with the selection of material and methods of physical education in the elementary school. Required of women majoring in physical education and of elementary education majors.
Fall and spring. Miss Kellam.

83b. PHYSICAL EDUCATION (3).
This course deals with the methods and materials of teaching physical education for girls in the junior and senior high school.
Summer only. Miss Kellam.

84. HEALTH EDUCATION FOR THE ELEMENTARY SCHOOL (3).
This course includes principles, practices, and procedures in health at the elementary level. The course is required of all majors in elementary education.
Fall and spring. Mr. Casey.

86. ORGANIZATION AND ADMINISTRATION OF HEALTH AND PHYSICAL EDUCATION (3).
This course deals with the policies and problems of organization and administration of health and physical education programs in schools.
Fall and spring. Mrs. Fink, Mr. Jamerson, Mr. House.

87. INDIVIDUAL PHYSICAL EDUCATION (4).
This course is a study of problems relating to body mechanics, the needs of the physically handicapped student, and the prevention and treatment of athletic injuries.
Fall and spring. Mr. Rabb, Mrs. Fink.

88. SAFETY, FIRST AID, ATHLETIC INJURIES (3).
This course considers the problems of safety in public schools, the theory and practice of first aid, and the care and treatment of athletic injuries.
Fall and spring. Messrs. Strayhorn, White.

Courses for Graduates and Advanced Undergraduates

120. PRINCIPLES OF PHYSICAL EDUCATION (2). Prerequisite, undergraduate work in education and psychology.
Fall. Mr. Jamerson.

121ab. ADMINISTRATION OF PHYSICAL EDUCATION (3).
Fall. Mr. Shepard, Mrs. Fink.

123. PERSONAL HYGIENE (2). Prerequisite, basic courses in science.
Fall. Mr. Peacock.

126ab. INDIVIDUAL PHYSICAL EDUCATION (3). Prerequisites, anatomy and physiology, or equivalent.
Spring. Mr. Rabb, Mrs. Fink.

127. INTRAMURAL AND EXTRAMURAL ACTIVITIES FOR SCHOOLS AND COLLEGES (2).
Fall. Mr. Rabb.

173. COMMUNITY RECREATION (Sociology 173) (3).
Mr. Meyer.

175. EXTRACURRICULAR ACTIVITIES (Education 175) (3).
Mr. Plemmons.

Courses for Graduates

220. TESTS AND MEASUREMENTS IN HEALTH AND PHYSICAL EDUCATION (2).
Spring. Messrs. Cornwell, Peacock.

221. PHYSIOLOGY OF EXERCISE (3). Prerequisites, zoology, anatomy, and physiology.
Three lecture and four laboratory periods a week, spring. Laboratory fee, $5.00.
Mr. Miller.

222. PRINCIPLES OF HEALTH EDUCATION (2). Prerequisite, adequate background in science.
(Not offered in 1954-1955.) *Spring.*

224. SCHOOL AND COMMUNITY HYGIENE (2). Prerequisite, adequate background in science.
Spring. Mrs. Fink, Mr. Cornwell.

225. MODERN PROBLEMS IN PHYSICAL EDUCATION (2). Prerequisites, experience and advanced work in physical education and education.
Spring. Messrs. Cornwell, Peacock, Shepard.

226ab. HISTORY OF THE DANCE (2).
(a) Dance in primitive cultures; in ancient Egypt, Greece, and Rome; in the medieval period. (b) The court ballet; modern dance; theatre dance; dance in education.
Spring. Miss Price.

320. RESEARCH IN PHYSICAL EDUCATION (2). Prerequisites, experience and advanced work in the field.
Fall. Messrs. Cornwell, Peacock, Mrs. Fink.

341abc. SEMINAR COURSE (2 each). Prerequisites, adequate training and experience, and consent of the instructor.
Fall and spring. Messrs. Cornwell, Jamerson, Shepard, Peacock.

DEPARTMENT OF PHYSICS

Professors: P. E. SHEARIN, *OTTO STUHLMAN, JR.
Associate Professors: W. A. BOWERS, A. V. MASKET, E. D. PALMATIER, J. W. STRALEY
Assistant Professors: KEITH W. JONES, EUGEN MERZBACHER
Instructor: W. G. JOHNSON
Part-time Instructors: A. ANTONAKOS, A. D. CAMPBELL, R. E. HILLER, JR., JOHN PETER KNUDSEN
Graduate Assistants: R. W. BREHME, J. R. HERRING, R. L. HUBBARD, M. N. KABLER, A. J. LAVIN, R. MACE, W. E. MEADOR, JR., A. K. NORBERG
Teaching Fellow: TRICIA REEVES
Technicians: N. DI COSTANZO, D. H. KEARNS, B. TILLMAN
Appartus Custodian: W. D. HARRELL
Assistant Professor of Astronomy: M. S. DAVIS

Requirements for Bachelor of Science in Physics

GENERAL COLLEGE

English 1, 2, 21
German or French (See p. 118)
Mathematics 7, 8 (or 15, 16), 31, and 34-35 or 32, 33. If Mathematics 15, 16 are taken in the freshman year omit Mathematics 31.
Chemistry 11-12 or 11-21
Social Science 1-2 and a social science elective
Physics 34-35 (or 24-25)
Physical Education 1, 2, 3, 4
Hygiene 11
Electives: One course in the humanities and one other course chosen from the list of sophomore electives on p. 120.

JUNIOR YEAR

†English 59
Mathematics 141
Physics 54, 104, 107, 108
Two non-divisional electives

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* Professor Emeritus.
† A non-divisional elective may be substituted if permission be granted by the Department of Physics.

SENIOR YEAR

Physics 105,106
Two courses from group A:
A. Physics 91, 92, 109, 120, 141, 150, 158, 160, 161, 162, 163, 170, 191, 192

Two courses from group B:
B. Mathematics 110, 111, 131, 147, 171, 172, 176, 191
Chemistry 31, 43, 44, 61, 62, 181, 182, 183
Two non-divisional electives

Requirements for graduation, at least 125 semester hours.

Courses for Undergraduates

20. TWENTIETH-CENTURY PHYSICS (4). No prerequisite.

Topics discussed include the historical development of the atomic and nuclear view of matter; the nature of light, x-rays, and radioactivity; the source of energy of the atomic and hydrogen bombs.

Three lecture and two laboratory hours a week, fall and spring. Laboratory fee, $6.00. Staff.

24, 25. GENERAL PHYSICS (8). Prerequisite or corequisite, Mathematics 7, 8 or equivalent.

NOTE: Both parts must be completed in order to receive any credit.

Three lecture and two laboratory hours a week, fall and spring. Laboratory fee, $6.00. Staff.

31. DESCRIPTIVE ASTRONOMY (4).

A study of the celestial sphere, earth, time, moon, eclipses, sun, solar system, stars, the Milky Way galaxy, extra-galactic systems, and cosmogony.

Three lecture and two laboratory hours a week, fall and spring. Laboratory fee, $4.00. Mr. Davis.

32. GENERAL ASTRONOMY (3). Prerequisite, Astronomy 31.

A more intensive study of the subjects in Astronomy 31 with emphasis on such selected topics as spectroscopic analysis of stars, Hertzsprung-Russell Diagram, peculiar stars, stellar systems, and modern cosmogonies.

Three lecture hours a week, spring. Mr. Davis.

34, 35. GENERAL PHYSICS (8). Prerequisites, Mathematics 7, 8.

Three lecture and two laboratory hours a week, fall and spring. Laboratory fee, $6.00 a semester. Staff.

45. PHOTOGRAPHY (4).

Three lecture and three laboratory hours a week, fall. Laboratory fee, $4.50. Mr. Scroggs.

54. MODERN DEVELOPMENTS IN PHYSICS (3). Prerequisite, Physics 35, or 25 with permission of the instructor; prerequisite or corequisite, integral calculus.

Three lecture hours a week, fall and spring. Mr. Shearin.

70. SPHERICAL ASTRONOMY (3). Prerequisites, Mathematics 33.

A fundamental course dealing with the celestial sphere, astronomical refraction, planetary motions and phenomena, time, aberration, parallax, precession and nutation, occultations, and eclipses. Includes solution of practical problems.

(1954-1955 and alternate years.) Mr. Davis.

71. ORBIT COMPUTATION (3). Prerequisite, Mathematics 141.

The two-body problem. The Laplacian and Gaussian methods of orbit determination on the basis of three observations. Calculation of ephemerides. Differential correction of orbits. Solution of an actual orbit will be made.

(1955-1956 and alternate years.) Mr. Davis.

91, 92. RESEARCH FOR SENIORS (3 each).
Laboratory fee, $5.00 each semester. Staff.

Courses for Graduates and Advanced Undergraduates

*104 (Formerly 52). MECHANICS (4). Prerequisites, integral calculus and Physics 35 or 25 with permission of instructor.
Three lecture and three laboratory hours a week, fall. Laboratory fee, $4.50. Mr. Masket.

*105 (Formerly 56). HEAT (4). Prerequisites, Physics 35 or 25 with permission of the instructor, and integral calculus.
Three lecture and three laboratory hours a week, fall. Laboratory fee, $4.50. Mr. Straley.

*106 (Formerly 53). OPTICS (4). Prerequisite, Physics 35 or 25 with permission of the instructor; prerequisite or corequisite, integral calculus.
Three lecture and three laboratory hours a week, spring. Laboratory fee, $4.50.

*107 (Formerly 61). ELECTRICITY AND MAGNETISM (4). Prerequisite, Physics 35 or 25 with permission of the instructor; prerequisite or corequisite, integral calculus.
Three lecture and three laboratory hours a week, fall. Laboratory fee, $4.50. Mr. Palmatier.

*108 (formerly 62). ALTERNATING CURRENT CIRCUITS (4). Prerequisite, Physics 107. Prerequisite or corequisite, differential equations.
Three lecture and three laboratory hours a week, spring. Laboratory fee, $4.50. Mr. Palmatier.

*109 (Formerly 99). INTRODUCTORY MATHEMATICAL PHYSICS (3). Prerequisites, Physics 104, 105, 107, 108, Mathematics 141.
This course will stress the application of mathematical techniques such as vector analysis, Fourier Series, and Green's Functions to physical problems. It is intended primarily for seniors who do not take Physics 191, 192.
Spring. Mr. Masket.

120. HEAT AND THERMODYNAMICS (4). Prerequisite, Physics 105, or by permission.
Three lecture and three laboratory hours a week, spring. Laboratory fee, $4.50. Mr. Straley.

131. (ASTRONOMY) CELESTIAL MECHANICS I (3). Prerequisite, Mathematics 141.
Central forces, potential and attraction of bodies, the two-body problem. Introduction to perturbation theory.
Three lecture hours. Mr. Davis.

141. ELECTRONICS (4). Prerequisites, Physics 104 and 108, Mathematics 141.
Two lecture and six laboratory hours a week, fall. Laboratory fee, $4.50. Mr. Palmatier.

150. PHYSICAL OPTICS (3). Prerequisites, Physics 106, Mathematics 141.
(1954-1955 and alternate years.) *Fall.* Mr. Bowers.

158. SOUND (4). Prerequisites, Physics 104 and Mathematics 141.
(1955-1956 and alternate years.) *Three lecture and three laboratory hours a week, spring. Laboratory fee, $4.50.*

* Physics 104-109 are not to be taken for graduate credit by physics majors.

160. EXPERIMENTAL ATOMIC PHYSICS (3). Prerequisites, calculus and two of the following: Physics 54, 104, 106, 107.
(1955-1956 and alternate years.) *Spring.*

161. NUCLEAR PHYSICS (3). Prerequisites, Physics 54, and one of the following: Physics 104, 105, 106, 107. Mathematics 141.
Fall. Mr. Shearin.

162. ATOMIC SPECTROSCOPY (4). Prerequisite, Physics 54.
Three lecture and three laboratory hours a week, spring. Laboratory fee, $4.50. Mr. Straley.

163. MOLECULAR SPECTROSCOPY (3). Prerequisite, one of the following: Physics 54, 105, 106.
(1955-1956 and alternate years.) *Fall.* Mr. Straley.

181, 182. ADVANCED LABORATORY (6 each). Prerequisites, Physics 104, 105, 106, 107, 108, or by permission.
Precise physical measurements with high grade instruments. Emphasis will be placed on the following branches of Physics: Nuclear Physics, Cosmic Rays, Atomic Physics, and Solid State Physics.
Six laboratory hours a week, fall and spring. Laboratory fee, $10.00 a semester. Mr. Palmatier and staff.

191, 192 (Formerly 101, 102). INTRODUCTION TO THEORETICAL PHYSICS (5 each). Prerequisites, Physics 104, 105, 108, Mathematics 141; Mathematics 171 desirable but may be taken concurrently.
Fall and spring. Mr. Bowers.

Courses for Graduates

201. BOUNDARY PROBLEMS IN CLASSICAL PHYSICS (3). Prerequisites, Mathematics 141, 172, Physics 192; Mathematics 149 is desirable.
(1954-1955 and alternate years.) *Spring.* Mr. Masket.

210. ELASTICITY AND HYDRODYNAMICS (3). Prerequisites, Mathematics 141, Physics 192.
Summer session only. Mr. Bowers.

221. KINETIC THEORY AND STATISTICAL MECHANICS (3). Prerequisites, Physics 120 and 192, except by permission; Physics 260 is desirable.
(1955-1956 and alternate years.) *Spring.* Mr. Bowers.

231. (ASTRONOMY) CELESTIAL MECHANICS II (3). Prerequisite, Astronomy 131.
Planetary theories. Developments of the disturbing function. Secular perturbations.
Three lecture hours. Mr. Davis.

240. ADVANCED ELECTROMAGNETIC THEORY (3). Prerequisites, Physics 192 or 141 and Mathematics 141.
(1955-1956 and alternate years.) *Fall.* Mr. Merzbacher or Mr. Bowers.

260, 261. QUANTUM MECHANICS (3 each). Prerequisites, Physics 192 and 162; Mathematics 143 is desirable.
Fall and spring. Mr. Merzbacher.

262. ADVANCED QUANTUM MECHANICS (3). Prerequisite, Physics 261.
(1954-1955 and alternate years.) Mr. Merzbacher.

264. SPECTROSCOPY OF THE INFRARED (5). Prerequisites, Physics 106 and 260.
(1954-1955 and alternate years.) *Spring.* Mr. Straley.

267. CURRENT ADVANCES IN PHYSICS (3). Prerequisite, permission of the instructor.
Fall or spring. Any of the graduate professorial staff.

268. THEORETICAL NUCLEAR PHYSICS (3). Prerequisites, Physics 161 and 262, except by permission.
(1954-1955 and alternate years.) *Fall.* Mr. Merzbacher.

269. NUCLEAR REACTORS (3). Prerequisites, Physics 161, 261.
(1954-1955 and alternate years.) *Spring.* Mr. Masket.

271. THEORY OF THE SOLID STATE (3). Prerequisite, Physics 260.
(1954-1955 and alternate years.) *Fall.* Mr. Bowers.

275. THEORY OF RELATIVITY (3). Prerequisites, Mathematics 141, Physics 192.
(1955-1956 and alternate years.) *Spring.* Mr. Merzbacher.

280. COSMIC RAYS (4). Prerequisites, Physics 192 and 161.
(1955-1956 and alternate years.) *Three lecture and three laboratory hours a week, spring. Laboratory fee, $5.00.* Mr. Palmatier.

301. RESEARCH (5 or more).
Ten or more laboratory or computation hours a week, either semester. Any member of the graduate professorial staff.

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*DEPARTMENT OF PHYSIOLOGY

Professors: J. H. FERGUSON, A. T. MILLER
Associate Professor: E. P. HIATT
Assistant Professor: J. H. PERLMUTT
Instructor: B. A. SCHOTTELIUS
Part-time Lecturer: W. S. MCCLELLAN
Technicians: R. S. SPARROW, D. C. WHITTINGHILL

Course for Undergraduates

51. GENERAL COURSE IN PHYSIOLOGY (3½). Prerequisites, general courses in zoology and chemistry. †Elective.
Four lecture and six laboratory hours a week, first eight weeks of spring semester. Laboratory fee, $5.00. Messrs. Ferguson, Miller, Hiatt, Perlmutt, Schottelius, McClellan.

Courses for Graduate and Professional Students

106. PHYSIOLOGY (6). Prerequisite, approval of the Head of the Department and the Dean of the Graduate School.
This general course covers the physiology of the blood, circulation, respiration, digestion, metabolism, excretions, body fluids, body temperature, endocrines, neuromuscular system, the autonomic and central nervous systems. It is required of

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* This is also a department in the School of Medicine which operates on the quarter system. Therefore, some of its courses are taught by the quarter. The credit in parentheses after the course title is in semester hours.
† Before registering for this work the academic student must secure the permission of his dean.

all dental students and is available to graduate students as part of a minor in physiology.

Five lecture and eight laboratory hours a week, winter quarter. Laboratory fee for non-dental students, $7.50. Messrs. Ferguson, Miller, Hiatt, Perlmutt, Schottelius, McClellan.

141. GENERAL COURSE IN PHYSIOLOGY I (3 1/3). Prerequisite, consult the instructors. Offered only in conjunction with Part II (142) in the succeeding quarter. *Elective.

Physiology of muscle and nerve, autonomic nervous system, heart, and circulation.

Three lecture and four laboratory hours a week, winter quarter. Laboratory fee, for non-medical students, $5.00. Messrs. Ferguson, Miller, Hiatt, Perlmutt, Schottelius.

142. GENERAL COURSE IN PHYSIOLOGY II (7 1/3). Prerequisite, consult the instructors. *Elective.

Physiology of blood, respiration, metabolism, kidney and water balance, alimentation and endocrines.

Six lecture and twelve laboratory hours a week, spring quarter. Laboratory fee for non-medical students, $10.00. Messrs. Ferguson, Miller, Hiatt, Perlmutt, Schottelius, McClellan.

143. NEUROLOGY (Anatomy 101) (6). Prerequisite, approval of Heads of Departments of Anatomy and Physiology. *Elective.

A study of anatomy and physiology of the central nervous system and organs of special sense, offered jointly with the Department of Anatomy.

Four lecture and six laboratory hours a week, spring quarter. Laboratory fee for non-medical students, $5.00. Staffs of Departments of Anatomy and Physiology.

Courses for Graduates

201. ENDOCRINOLOGY (3 1/3). Prerequisite, see instructor.

A survey of the functional aspects of the endocrine glands. The experimental point of view is emphasized with discussion of the basic physiology underlying endocrinopathies.

Three lecture and four laboratory hours a week, fall or winter quarter. Laboratory fee, $10.00. Mr. Perlmutt.

202. BLOOD (3 1/3). Prerequisite, see instructor.

An introduction to the technical problems involved in investigations of blood coagulation and the functions of the formed elements of the blood.

Three lecture and four laboratory hours a week, fall quarter. Laboratory fee, $10.00. Mr. Ferguson.

211. RESPIRATION AND METABOLISM (3 1/3). Prerequisite, see instructor.

An introduction to the study of energy metabolism and tissue respiration with applications to both human and comparative physiology.

Three lecture and four laboratory hours a week, spring quarter. Laboratory fee, $10.00. Mr. Miller.

212. RENAL PHYSIOLOGY AND WATER BALANCE (3 1/3). Prerequisite, see instructor.

A consideration of the factors concerned in the regulation of the composition and volume of the body fluids, including the techniques for measuring renal function and body fluid compartments.

Three lecture and four laboratory hours a week, fall quarter. Laboratory fee, $10.00. Mr. Hiatt.

* Before registering for this work the academic student must secure the permission of his dean.

DEPARTMENT OF POLITICAL SCIENCE

Professors: C. B. ROBSON, W. W. PIERSON, K. C. FRAZER, P. W. WAGER, W. S. JENKINS, G. A. HEARD, D. G. MONROE, *SVEN CLAUSEN
Associate Professors: F. G. GIL, F. N. CLEAVELAND
Assistant Professor: W. R. PULLEN
Visiting Lecturer: J. L. CHASE
Instructors: G. B. CLEVELAND, RUTH ROETTINGER, HARRY M. SCOBLE, JR.
Part-time Instructors: J. H. DEGROVE, J. W. DIMMICK, C. C. MOSES, HENRY C. RANDALL, G. E. WOLFF
Instructor in Social Science: F. H. HARRIS
Teaching Fellow: MILOSLAV NEKVASIL

The requirements for the A.B. with a major in political science are Political Science 41 (or the equivalent), at least two additional exclusively undergraduate courses (selected from Political Science 42, 51, 52, 53, 86, and 87), and a sufficient number of other political science courses to make a total of eight. The courses must be distributed among at least three of the several fields of political science; (1) local, state, and federal government in the United States; (2) public administration; (3) foreign and comparative government; (4) international law and relations; and (5) political theory and jurisprudence. There must, however, be a certain degree of concentration in one of these fields.

Also, in choosing allied courses, selections should be made which support the field of concentration. These requirements can be met and still allow an assembly of courses dealing with a specific geographic area such as Latin America.

Students who have shown exceptional competence are permitted to pursue a reading program in lieu of two regular courses. This modified course of study, if completed satisfactorily, leads to the A.B. with Honors in Political Science.

Training for Public Administration

Professional training for such positions in the public service as general administrators (including city managers), public personnel specialists, and public financial administration specialists is offered by the department at the graduate, rather than the undergraduate, level. However, the student may obtain through an undergraduate major in political science the necessary foundation for the United States Civil Service Commission's annual examination for a position as Junior Management Assistant. He may also obtain the foundation for graduate professional training in public administration.

Since government requires many kinds of skills in its staff, students may prepare for entry into the public service through many departments of the University. In recognition of this, and regardful of the special needs of the public official, the Division of Social Sci-

* Whitney-Fulbright Visiting Lecturer, fall, 1954.

ences of the College of Arts and Sciences has recommended that students planning to enter the public service, regardless of undergraduate major, incorporate the following courses in their programs, consistently, of course, with other College requirements: Political Science 41, Economics 31-32 (or 61), Psychology 24-25, Political Science 101, History 22 or 72 or 114, Economics 170, Business Administration 71, and English 52.

The department will be glad to advise students interested in preparing for the public service.

Courses for Undergraduates

41. INTRODUCTION TO GOVERNMENT IN THE UNITED STATES (3). An analysis of the genesis, structure, powers, and functions of the federal government, and an examination of federal-state relations.

Fall and spring. Materials fee, $1.00. Mr. Cleveland, Chairman.

NOTE: This course, or the equivalent, is a prerequisite for all other political science courses.

42. THE PROCESSES AND PROBLEMS OF GOVERNMENT IN THE UNITED STATES (3).

Designed as complementary to Political Science 41, especially for students not majoring in political science. The course deals chiefly with the efforts made by government in the United States to solve internal public problems. It treats particularly government policies toward agriculture, labor, and business.

Fall and spring. Materials fee, $1.00. Miss Roettinger, Messrs. Cleveland, Scoble.

51. STATE GOVERNMENT IN THE UNITED STATES (3).

The organization and administrative methods of state government, with some examination of the relationships between the state government and the counties, cities, and towns.

Fall and spring. Materials fee, $1.00. Messrs. Monroe, Wager.

52. THE GOVERNMENTS OF EUROPE (3).

The government and politics of Great Britain, France, and Russia; a survey of constitutional development, but with emphasis upon organization and methods of government.

Fall and spring. Materials fee, $1.00. Mr. Chase.

55. SOVIET TOTALITARIANISM (3).

An explanation of the revolution of 1917 and a review of the subsequent power struggle and gradual development of the police state. Also an analysis of the effects of the dictatorship on communications, education, science, the arts, labor, minority groups, and the family.

Spring. Materials fee, $1.00. Mr. Robson.

86. INTERNATIONAL RELATIONS AND WORLD POLITICS (3).

Analysis of politics among nations: imperialism, balance of power, international morality, sovereignty, diplomacy, analysis of the problem of peace, disarmament, international organizations, world government, diplomacy.

Fall and spring. Materials fee, $1.00. Messrs. Robson, Frazer, Chase.

87. INTERNATIONAL RELATIONS OF THE LATIN AMERICAN REPUBLICS (3).

Historical survey of diplomatic relations of the Latin American republics with the rest of the world with special emphasis upon relations with the United States.

Fall and spring. Materials fee, $1.00. Mr. Gil.

91-92. HONORS COURSE (6). Required of all students reading for Honors in Political Science.

Courses for Graduates and Advanced Undergraduates

101. PUBLIC ADMINISTRATION (3).
A study of the basic principles of organization, location of authority, fiscal management, personnel management, and forms of administrative action in the public service.
Fall and spring. Materials fee, $1.00. Messrs. Wager, Cleaveland.

105. PUBLIC PERSONNEL ADMINISTRATION (3).
A study of the civil service—its recruitment, training, classification, promotion, restrictions, immunities, compensation and morale; and of the machinery which has been developed for handling personnel matters.
Spring. Materials fee, $1.00. Mr. Wager.

121. THE GOVERNMENT OF ENGLAND (3).
The development and operation of British government in its local, national and imperial aspects and an examination of current developments in social and economic policy.
Fall. Materials fee, $1.00. Mr. Robson.

123. COMPARATIVE GOVERNMENT (3).
A comparative study of the principles, structure, and operation of contemporary governmental systems with special attention to those of continental Europe.
Spring. Materials fee, $1.00. Mr. Robson.

126. THE HISPANIC EMPIRES IN AMERICA (3).
A study of the political and social institutions in the Spanish and Portuguese colonial systems and their development.
Fall. Materials fee, $1.00. Mr. Gil.

127. GOVERNMENT OF LATIN AMERICAN STATES (3).
The forms of organization, the functions, and the operations of government in Latin America with emphasis on present conditions, tendencies, and peculiar types of institutions.
Fall. Materials fee, $1.00. Messrs. Pierson, Gil.

132. MUNICIPAL GOVERNMENT IN THE UNITED STATES (3).
Chartered city and town governments: origin, history, forms, and relations to national, state, and county governments.
Fall. Materials fee, $1.00. Mr. Wager.

133. MUNICIPAL ADMINISTRATION IN THE UNITED STATES (3).
Administrative organization, procedure, and problems of cities and towns.
Spring. Materials fee, $1.00. Mr. ————.

134. COUNTY GOVERNMENT AND ADMINISTRATION (3).
A review of the historical antecedents of American counties and townships; the present organization, powers, functions, and intergovernmental relations of these units; and significant trends.
Fall. Materials fee, $1.00. Mr. Wager.

141. PRINCIPLES OF INTERNATIONAL LAW (3).
A study of the historical development and the principles of the law of nations, together with the organization and procedure of institutions for the peaceful settlement of international disputes. Lectures, readings.
Fall. Materials fee, $1.00. Mr. Frazer.

142. THE UNITED NATIONS (3).
A survey of the background, organization, and procedures of the United Nations organization. Lectures, readings.
Spring. Materials fee, $1.00. Mr. Frazer.

144. THE ORGANIZATION AND CONDUCT OF THE FOREIGN RELATIONS OF THE UNITED STATES (3).
Principal consideration is given to the organization of the government of the United States for the conduct of its foreign relations, e.g., the Department of State, the Foreign Service, etc.
Fall. Materials fee, $1.00. Mr. Chase.

145. CONTEMPORARY INTERNATIONAL RELATIONS OF THE UNITED STATES (3). Permission of the instructor is required.
The course is suited to undergraduates and graduates with some knowledge of international relations who wish to study the contemporary foreign policy of the United States.
Spring. Materials fee, $1.00. Mr. Frazer.

147. INTER-AMERICAN REGIONAL ORGANIZATIONS (3).
The evolution of the inter-American security system, recent Pan-American conferences and the activities and problems of the various continental agencies.
Spring. Materials fee, $1.00. Mr. Gil.

151. THE ELEMENTS OF POLITICAL SCIENCE (3).
A study of the principles of political science and of the important theories respecting the nature, origin, forms, and ends of the state and of government.
Fall. Materials fee, $1.00. Mr. Pierson.

154. DEVELOPMENT OF THE ENGLISH CONSTITUTION (History 141) (3).
Emphasis upon the major constitutional documents and the development of the national political institutions with considerable attention to the leading constitutional cases and principles of law.
Spring. Mr. Godfrey.

155. THE CONSTITUTION OF THE UNITED STATES (History 175) (3).
A study of the fundamental principles of constitutional interpretation and practice in the United States by means of lectures, textbooks, and cases.
Fall and spring. Materials fee, $1.00. Mr. Jenkins.

156. CONTEMPORARY PROBLEMS IN GOVERNMENT (3).
Problems in international, national, state, and local government and administration based on a comparison of United States, British, and Canadian governments.
(Not offered in 1954-1955.) *Spring. Materials fee, $1.00.* Mr. ————.

157. HISTORICAL JURISPRUDENCE (3).
In this course the currents of political ideas in the western world were examined with particular reference to their influence in the Scandinavian countries.
(Not to be offered in 1955-1956.) *Fall. Materials fee, $1.00.* Mr. Clausen.

159. THE BRITISH EMPIRE (History 159) (3).
From the old colonial system to the constitutional development of the Commonwealth; special attention to Canada and to the important documents of Commonwealth growth, including the most recent ones.
Fall. Mr. Godfrey.

162. AMERICAN POLITICAL THOUGHT (3).
An analysis of the ideas underlying government and politics in the United States.
(Not offered in 1954-1955.) *Fall. Materials fee, $1.00.* Mr. Robson.

165. POLITICAL THOUGHT OF THE EIGHTEENTH CENTURY (3).
The development of liberal and democratic political thought, with emphasis on the ideas of the American and the French Revolutions.
(Not offered in 1954-1955.) *Spring. Materials fee, $1.00.* Mr. Pierson.

166. RECENT AND CONTEMPORARY POLITICAL THOUGHT (3).
The theory of constitutional democracy together with an examination of the principal lines of criticism of this form of government and of the ideologies antagonistic to it.
Spring. Materials fee, $1.00. Mr. Robson.

167. POLITICAL THOUGHT IN LATIN AMERICA (3).
An analysis of the development of political philosophy in Latin America with an examination of the evolution of democratic thought.
Spring. Materials fee, $1.00. Mr. Pierson.

175. POLITICAL PARTIES AND ELECTORAL PROBLEMS IN THE UNITED STATES (3).
Development of political parties and of nomination and election machinery and procedure. Intensive study of present organization, procedure, and problems of parties and of national, state, and local election laws.
Fall. Materials fee, $1.00. Mr. Scoble.

181. RECENT NATIONAL POLICY AND ADMINISTRATION (3). Additional prerequisite, Economics 31-32 or equivalent.
Analytical and critical survey of basic national policies affecting business, labor, agriculture, special groups and industries, and the economy in general. Foreign policy is excluded.
Spring. Materials fee, $1.00. Mr. Cleaveland.

185. FINANCIAL ADMINISTRATION (3).
An analysis of the fiscal agencies in federal, state, and local government; and of the principles and practices of budgeting, accounting, auditing, purchasing, tax administration, and treasury management.
(Not offered in 1954-1955.) *Fall. Materials fee, $1.00.* Mr. Wager.

191. PUBLIC FINANCE (Economics 141) (3). Additional prerequisite, Economics 31-32 or equivalent.
Fall and spring. Messrs. Spruill, Ashby.

193. PROBLEMS IN STATE AND LOCAL FINANCE (Economics 143) (3). Additional prerequisite, Economics 141 or equivalent.
Spring. Mr. ————.

197. GOVERNMENT AND BUSINESS (Economics 197) (3). Additional prerequisite, Economics 31-32 or equivalent.
Spring. Messrs. Hobbs, Carter, Barrett.

Courses for Graduates

200. THE POLITICAL PROCESS (3).
An examination of government in action, with emphasis on the relationship between the formal and informal and between government and society.
Spring. Mr. Heard.

209. PLANNING AND GOVERNMENT (City and Regional Planning 209) (3). Survey of nature and scope of government planning, its relation to other governmental activities, and its administrative and organizational problems.
Fall. Mr. Cleaveland.

210. PUBLIC ADMINISTRATION OF RESOURCES (3). Additional prerequisite, Political Science 101 or equivalent.
A study of the agencies, principles, and procedures which have been evolved by the national and state governments in regulating or administering natural resources.
(Not offered in 1954-1955.) *Fall. Materials fee, $1.00.* Mr. Wager.

221. ADMINISTRATIVE LAW (3). Additional prerequisite, Political Science 101 or equivalent.
Legal setting of public administration, emphasizing governmental regulatory activities: administrative legislation, administrative adjudication, procedural restrictions, judicial review of administrative decisions, government and official liability.
(1953-1954 and alternate years.) *Spring. Materials fee, $1.00.* Mr. Monroe.

225. ADMINISTRATIVE ORGANIZATION AND MANAGEMENT (3). Additional prerequisite, Political Science 101 or equivalent.
A study of the structural and management aspects of public administration: organization theory and practice, policy formation processes, techniques of administrative improvement, field administration.
Spring. Materials fee, $1.00. Mr. Cleaveland.

231. THE LEGISLATIVE PROCESS (3).
(1953-1954 and alternate years.) *Spring. Materials fee, $1.00.* Mr. Jenkins.

235. THE JUDICIAL PROCESS (3). Additional prerequisite, Political Science 155 or equivalent.
(Not offered in 1954-1955.) *Spring. Materials fee, $1.00.* Mr. Jenkins.

241. INTERNATIONAL LAW (3). Additional prerequisite, Political Science 141 or equivalent.
A comprehensive study of the law of nations by the discussion of illustrative cases and other documentation. Lectures and reports.
Fall. Materials fee, $1.00. Mr. Frazer.

242. INTERNATIONAL ORGANIZATION (3).
A study of the structure, procedures, and problems of current public organizations for maintaining international peace. Lectures and reports.
Spring. Materials fee, $1.00. Mr. Frazer.

244. PROBLEMS OF CONTEMPORARY FOREIGN POLICY AND INTERNATIONAL POLITICS (3).
Spring. Materials fee, $1.00. Mr. Chase.

255. PROBLEMS IN CONSTITUTIONAL LAW (3).
Fall. Materials fee, $1.00. Mr. Jenkins.

Seminar Courses for Graduates

Prerequisite, a political science major or the equivalent.

301ab. MODERN INTERNATIONAL RELATIONS (6).
Conferences. Mr. Frazer.

311ab. SEMINAR IN AMERICAN POLITICAL THEORY (6).
Mr. Pierson.

321ab. STATE AND LOCAL GOVERNMENT (6).
Mr. Wager.

331. PROBLEMS IN PUBLIC ADMINISTRATION (3).
Individual and group research projects on particular administrative agencies and significant problems of administrative theory and practice.
Spring. Mr. Cleaveland.

341. SEMINAR COURSE (3).
A research or reading course in a special field.
Fall and spring. Any member of the graduate faculty.

342. READING COURSE IN LATIN AMERICAN GOVERNMENT (3).
Fall and spring. Messrs. Gil, Pierson.

343. READING COURSE IN POLITICAL THEORY (3).
Fall and spring. Mr. Pierson.

355. RESEARCH IN PUBLIC RECORDS (3).
Open to advanced graduate students in any of the social sciences.
(Not offered in 1954-1955.) *Spring.* Messrs. Jenkins, Pullen.

361. PROBLEMS IN RECENT AND CONTEMPORARY POLITICAL THEORY (3).
Fall and spring. Messrs. Pierson, Robson.

375. THESIS COURSE (3).
Fall and spring. Members of the graduate faculty.

PORTUGUESE
(See Romance Languages)

DEPARTMENT OF PSYCHOLOGY

Professors: DOROTHY C. ADKINS, J. F. DASHIELL, H. W. CRANE, *ENGLISH BAGBY
Research Professor and Director of the Psychometric Laboratory: L. L. THURSTONE
Associate Professors: W. J. DANIEL, †H. G. MCCURDY, JOHN THIBAUT, G. S. WELSH, W. G. DAHLSTROM, E. R. LONG, E. EARL BAUGHMAN
Assistant Professors: THOMAS JEFFREY, JOHN MELLINGER, JUNE CHANCE, MILTON ROSENBAUM
Part-time Instructors: BOBBY JACK CAMPBELL, J. T. HAMMACK, RICHARD DE CHARMS, JACK STREB, SAMUEL GUSKIN, MARY LEE GEISSER, MARTIN WALLACH
TEACHING FELLOW: BERNARD LEVIN
United States Public Health Service Fellows: JOAN FRENCH, WILSON E. MEADERS, JR., PATRICIA FOSSUM
Research Assistants: JOHN KELTON, JOYCE HAYES, ELIZABETH STEWART, WILLIAM CHRISTY, LOIS CUMMINGS
Graduate Assistants: RAIMOND EMMERS, EHUD KOCH

Undergraduate students intending to major in psychology are advised to include courses in biology, physics, mathematics, sociology, and anthropology in their studies. Although the emphasis in undergraduate study is not on specialization within the field of psychology, pro-

* Died January 14, 1955.
† Kenan leave of absence, spring semester, 1955.

grams for majors with varying directions of interest may appropriately vary somewhat. Students who anticipate graduate training as preparation for *teaching and research* might include Psychology 122, 126, 130, 140 or 144, 146 and courses in biology, physics, and mathematics as well as in the social sciences. For a professional career in *personnel* or *psychometrics:* Psychology 130, 131, 132, 135, 136, 148, 181 and courses in mathematics, economics, and business administration. Students who plan to enter the profession of *clinical psychology* might include Psychology 122, 126, 130, 140 or 144, 141, 145, 146, 148 and courses in physiology, educational-vocational guidance, sociology, and anthropology. Details of the student's program are planned with his adviser.

For graduate students the emphasis is not on specific courses as such but rather on different areas of competence, in which progress is assessed by examinations. In consultation with his adviser, the student plans a program of study and research adapted to his needs and interests. More detailed information is given in mimeographed materials available upon request from the Department of Psychology.

Practicum experience in advanced psychometric techniques is available to qualified students in connection with research projects of the Psychometric Laboratory, under the direction of L. L. Thurstone. Project directors in the laboratory are Thelma Gwinn Thurstone, Professor of Education; Thomas Jeffrey; and John Mellinger.

Personnel and material facilities for graduate level professional training in clinical psychology are available both on and off the campus. Practicum experience in diagnostic and therapeutic procedures is available to qualified students through the University Memorial Hospital. The department participates in the clinical training programs sponsored by the Veterans Administration and the United States Public Health Service.

The student is referred also to courses in educational psychology, statistics, neurology, physiology, sociology, and anthropology listed by other departments of the University.

Some courses will be given in alternate years, as demand warrants.

Courses for Undergraduates

24, 25. GENERAL PSYCHOLOGY (4 each).

Psychology is presented by lectures, demonstrations, and laboratory work, as a biological science. Practical applications are made secondary to the understanding of basic concepts and phenomena.

Three lecture and demonstration hours and two laboratory hours a week, fall and spring. Laboratory fee, $3.00 a semester. Lecturers: Messrs. Dashiell, Daniel, McCurdy, Long, Thibaut, Rosenbaum, Misses Chance, Adkins. Laboratory: Messrs. McCurdy, Daniel, Long, Campbell, Hammack, de Charms, Streb, Guskin.

NOTE: Although these courses may be elected separately, it is strongly urged that Psychology 24 be taken before Psychology 25. No student may register for the

laboratory without the lectures except majors in psychology who have received credit for the lectures.

30. THE PSYCHOLOGY OF ADJUSTMENT (3). No prerequisite. May not be counted toward a major. For students in nursing and dental hygiene.

A survey of the environmental factors and conditions of psychological development important in control of mental health for individual and community.

Fall. Mr. Welsh.

40. THE PSYCHOLOGY OF PERSONALITY (3). No prerequisite. May not be counted toward a major.

An elementary presentation of the part played by intelligence, emotionality, and modes of adjustment in personal problems.

Fall and spring. Messrs. Baughman, Welsh.

Courses for Graduates and Advanced Undergraduates

NOTE: Psychology 24 and 25 are prerequisite to all courses numbered above 100.

104. ADVANCED GENERAL PSYCHOLOGY (3).

A survey of recent major experiments, to serve as an intensive review, especially for first-year graduate students. Emphasis is upon methodology.

Fall. Messrs. Daniel, Long, Dashiell.

122. HUMAN LEARNING (3).

Technical and theoretical problems involved in memorizing, conditioning, and problem-solving.

Spring. Messrs. Daniel, Long, Dashiell.

126. CHILD DEVELOPMENT (3).

Survey of development of the normal child, with particular attention to social relations. Biological and cultural factors are considered.

Fall. Mr. McCurdy, Miss Chance.

130. ELEMENTARY PSYCHOLOGICAL STATISTICS (3).

Distributions and correlations, as in the conventional courses in the subject. Psychological types of problems used.

Two lecture and two laboratory hours a week, fall. Laboratory fee, $2.00. Miss Adkins, Mr. Levin.

131. DESIGN OF PSYCHOLOGICAL EXPERIMENTS (3). Prerequisite, Psychology 130.

Special problems in design and analysis of psychological research, including sampling and methods of controlling or eliminating undesirable sources of variability.

Two lecture and two laboratory hours a week, spring. Mr. Mellinger.

132. TEST CONSTRUCTION (3). Prerequisites, Psychology 130, 148.

Training in the techniques of constructing and planning of written tests, essay and objective, and of performance tests for aptitudes and achievement. Other types of measuring devices are given some attention.

(1954-1955 and alternate years.) *Two lecture and two laboratory hours a week, spring. Laboratory fee, $2.00.* Miss Adkins, Mr. Levin.

133. INTRODUCTION TO SOCIAL PSYCHOLOGY (Sociology 133) (3).

Examination of social systems from various points of view, stressing interpersonal relations and the evaluation of representative methods of observation, experiment, and analysis.

Fall and spring. Messrs. McCurdy, Thibaut, Rosenbaum.

135. PERSONNEL PSYCHOLOGY (3).
Methods of analyzing jobs and of selecting, training, motivating, and evaluating employees.
Fall. Miss Adkins, Messrs. Jeffrey, Mellinger.

136. INTERVIEWING TECHNIQUES (3).
Survey of occupations in which interviewing is an important component. Analysis of general principles of good interviewing and of special procedures for particular needs.
Spring. Miss Chance, Mr. Crane.

140. PERSONALITY (3).
Development and modern application of the concept of personality as a more or less self-determining system of beliefs, values, and behavior tendencies.
Fall. Mr. McCurdy.

141. INTRODUCTION TO THE PSYCHOLOGICAL CLINIC (3). Prerequisites, Psychology 146; and any one of 140, 144, 145, or 148.
A survey of the function of the clinic, role of personnel, types of cases seen, and various techniques used to understand and treat maladjusted persons.
Spring. Mr. Baughman.

144. MENTAL HYGIENE (3).
A genetic approach to problems of adjustment in relation to causative factors found in infancy, preschool, school, and adult periods. Case material is used with direct application to specific problems.
Fall. Mr. Crane.

145. THE DEVIANT CHILD (3).
Survey of behavior deviations in children and theories of their origin and development. Remedial procedures are considered.
Fall. Mr. Crane, Miss Chance.

146. PSYCHONEUROSES AND PSYCHOSES (3).
Sensory, emotional, memory, etc., abnormalities; their bases; their groupings into the syndromes of the major and minor mental disorders.
Fall. Messrs. Crane, Welsh.

148. TESTS AND MEASUREMENTS (3).
Survey of principal types of psychological measuring instruments.
Two lecture and two laboratory hours a week, spring. Laboratory fee, $3.00. Messrs. Crane, Welsh.

151. ORIGINAL PROBLEMS (3).
Six laboratory hours a week, fall and spring. Laboratory fee, $3.00. Staff.

181. LABORATORY ANALYSIS IN PERSONNEL WORK (Business Administration 153) (3). Advised prerequisite, Psychology 135 or Business Administration 150 or equivalent.
A laboratory course in personnel techniques as applied practically to job analysis, constructing application blanks, rating scales, etc.
One lecture and four laboratory hours a week, spring. Laboratory fee, $3.00. Miss Adkins, Messrs. Jeffrey, Levin.

Courses for Graduates

201, 202. EXPERIMENTAL METHODS AND PROCEDURES (3 each). Prerequisite, Psychology 130.

Laboratory working over of the principal problems of classic experimentation: psychophysics, sensory qualities, perception, reaction time, feeling, work and fatigue, conditioning, learning, etc. Intensive study of principles of experimental design.

One lecture and five laboratory hours a week, fall and spring. Laboratory fee, $3.00. Messrs. Daniel, Long.

205. NEUROPHYSIOLOGICAL PSYCHOLOGY (3).

The neural bases of behavior, with emphasis upon structural character of cord, brain, and sense organs. Laboratory work with slides and specimens.

Two lecture and two laboratory hours a week, fall. Laboratory fee, $3.00. Mr. Crane.

206. PHYSIOLOGICAL BASIS OF BEHAVIOR (3).

Functioning of various organs and organ-systems (motor, emotional, endocrine, and neural) as determinants of over-all behavior. More extensive and less intensive coverage than in course 205. Lectures with incidental laboratory work.

Spring. Messrs. Long, Dashiell.

211. HISTORICAL SURVEY OF PSYCHOLOGY (3).

Some attention is given to psychological concepts in ancient and early modern philosophies. Most emphasis is upon developments of the eighteenth and nineteenth centuries in German experimental, French clinical, British biological, and Russian objective movements.

Fall. Messrs. Dashiell, McCurdy.

212. CONTEMPORARY PSYCHOLOGICAL TRENDS (3).

Readings in the original writings of structuralism, behaviorism, gestalt, psychoanalysis, and other recent movements.

Spring. Messrs. Dashiell, McCurdy.

225. ANIMAL BEHAVIOR (3).

Survey of experimental work in motivation and development, sensory capacities, learning, and other basic psychological concepts. Laboratory work to familiarize the student with simple research procedures.

Two lecture and two laboratory hours a week, spring. Laboratory fee, $2.00. Messrs. Daniel, Dashiell.

226. EXPERIMENTAL CHILD PSYCHOLOGY (3).

A survey of research contributions to the field of development, as regards both aspects (physical, emotional, etc.) and age periods (neonate, preschool, adolescent, etc.). Methodology in research to be emphasized. Experiments and controlled observations.

Two lecture and two laboratory hours a week, fall. Laboratory fee, $2.00. Mr. Dashiell.

227. THEORIES OF PERSONALITY (Sociology 227) (3).

A summary of the major contemporary theories of personality, with some consideration of relevant empirical research.

Fall. Mr. Baughman.

228. ADVANCED SOCIAL PSYCHOLOGY (Sociology 228) (3). Prerequisite, Psychology (Sociology) 133 or equivalent.

A summary of the main theoretical and substantive trends in contemporary social psychology, with emphasis upon the role of small group theory and research.

Spring. Mr. Thibaut.

230. ADVANCED PSYCHOLOGICAL STATISTICS (3). Prerequisite, Psychology 130 or equivalent.

Underlying bases of various methods for analyzing psychological data, including such topics as hypothesis formulation and testing, contingency analysis, chi square, analysis of variance, partial and multiple correlation and factor analysis.

Two lecture and two laboratory hours a week, spring. Laboratory fee, $2.00. Miss Adkins.

231. PSYCHOPHYSICS (3). Prerequisite, Psychology 130 or equivalent.

Principles of psychophysics, including classical methods and reproduction, limits, paired comparison, equal-appearing intervals, etc. Special topics including Weber's law, Fechner's law, prediction of choice, consumer preference, effects of propaganda.

(1955-1956 and alternate years.) *Two lecture and two laboratory hours a week, fall.* Messrs. Thurstone, Mellinger.

232. TEST THEORY AND ANALYSIS (3). Prerequisite, Psychology 130; 132 and 230 desirable.

Principles of mental measurement; theoretical bases of analyzing tests; selection and weighting of composite tests; scaling theory.

(1955-1956 and alternate years.) *Two lecture and two laboratory hours a week, spring. Laboratory fee, $2.00.* Miss Adkins.

233. METHODS OF SOCIAL PSYCHOLOGY (Sociology 233) (3).

An analysis of methods of investigation in social psychology with their application to the social sciences. Major attention will be focused upon survey methodology with particular emphasis upon the techniques, contributions, and limitations of public opinion polling.

Spring. Mr. Thibaut.

234. MATHEMATICAL PSYCHOLOGY (3). Prerequisite, permission of the instructor.

Illustrations of psychology as a quantitative rational science. Topics from a wide range: vision, nervous system, learning, war psychology, attention, fatigue, and others.

Offered as demand warrants.

235. MEASUREMENT OF ATTITUDES (Sociology 235) (3). Prerequisite, Psychology 130 or equivalent.

Consideration of major approaches to opinion and attitude measurement, with special reference to the advantages and limitations of each.

(Not offered in 1954-1955.) *Fall.* Mr. Gibson.

236. PSYCHOLOGICAL ASPECTS OF FACTOR ANALYSIS (Statistics 664) (3). Prerequisite, Psychology 130 and 131 or 230; or Statistics 512 and 513; or equivalent.

Topics such as history of factor analysis, two-factor theory, centroid analysis, communalities, orthogonal and oblique factors, simple structure, rotational methods, second-order factors, new developments.

(1954-1955 and alternate years.) *Two lecture and two laboratory hours a week, fall.* Messrs. Thurstone, Mellinger.

237. SPECIAL PROBLEMS IN FACTOR ANALYSIS (Statistics 663) (3). Prerequisite, Psychology 236 or Statistics 661 and 662.

A seminar devoted to special problems in applied multivariate analysis, particularly designed for advancing the use of these methods in research problems. The emphasis for psychology majors will be on factor analysis.

(1954-1955 and alternate years.) *Six laboratory hours a week, spring.* Messrs. Thurstone, Nicholson, Jeffrey.

240. PSYCHODYNAMICS OF BEHAVIOR (3). Prerequisites, Psychology 140, 201 or 202.

Laboratory-lecture study of selected topics in the general area of emotion and motivation.

(Not offered in 1954-1955.) *Two lecture and two laboratory hours a week, spring.* Mr. McCurdy.

246. ADVANCED ABNORMAL PSYCHOLOGY (3). Prerequisites, Psychology 140, 146 or 212.

Special theoretical and research problems of behavior pathology.

Spring. Mr. Welsh.

247. METHODS OF MENTAL EXAMINATION (3).

Methods of securing information pertinent to adequate evaluation of the problems leading to case referral, procedures to be utilized in case study, and interpretation of test data.

(Not offered in 1954-1955.) *Two lecture and two laboratory hours a week, spring. Laboratory fee, $3.00.* Mr. Crane.

249. CLINICAL PRACTICES, INDIVIDUAL TESTS (CHILDREN) (3). Prerequisites, Psychology 148 and permission of the instructor.

Emphasis is upon the acquisition of skill in the administration, scoring, and interpretation of intelligence tests most frequently used in the examination of children but with some reference to the testing of adults.

Six laboratory hours a week, fall. Laboratory fee, $3.00. Miss Chance.

250. CLINICAL PRACTICES, INDIVIDUAL TESTS (ADULTS) (3). Prerequisites, Psychology 146 and 148 and permission of the instructor.

Emphasis is upon the acquisition of skill in the administration, scoring, and interpretation of intelligence tests most frequently used in the examination of adults but with some reference to the testing of children.

Six laboratory hours a week, spring. Laboratory fee, $3.00. Miss Chance.

255. THEORY OF PROJECTIVE TECHNIQUES (3). Prerequisites, Psychology 140, 141, 249, 250.

As clearly distinguished from other psychometric methods, projective methods of examination as now widely employed, their psychological assumptions, validity, and reliability.

Two lecture and two laboratory hours a week, fall. Mr. Dahlstrom.

256, 257. CLINICAL PRACTICES IN PROJECTIVE TECHNIQUES (3 each). Prerequisites, Psychology 255 and permission of the instructor.

256: To develop competence in the scoring and interpretation of projective tests administered to normal subjects. 257: To obtain experience in examining clinical cases.

Six hours a week, fall and spring. Messrs. Welsh, Dahlstrom.

258. METHODS OF PSYCHOTHERAPY (3). Prerequisites, Psychology 255 and permission of the clinical staff.

An intensive survey of the theories and techniques of the most frequently employed methods of psychotherapy.

Fall. Mr. Baughman.

259, 260, 261. CLINICAL PRACTICES IN PSYCHOTHERAPY (3 each). Prerequisites, Psychology 258 and permission of the instructor.

Supervised training in psychotherapeutic procedures with clinical subjects, further study of the literature, and participation in clinical staff conferences.

Six hours a week, fall and spring. Messrs. Welsh, Crane, Baughman, Dahlstrom, Miss Chance.

271. BEHAVIOR THEORIES (3).
Contemporary theories of behavior and learning taken up critically and comparatively. Student designs problems within each.
Fall. Mr. Daniel.

325. SEMINAR IN THEORETICAL-EXPERIMENTAL PSYCHOLOGY (1, 2, or 3).
The topic will vary with the interests of students and staff members.
Either semester, as announced. Staff.

326. SEMINAR IN CLINICAL PSYCHOLOGY (1, 2, or 3).
Systematic surveys of research in (a) personality dynamics; (b) techniques currently employed with specific traits; (c) techniques employed in personality analysis; and (d) techniques with maladjusted persons as shock, drug, hypnotic, etc.
Either semester, as announced. Staff.

327. SEMINAR IN ABNORMAL PSYCHOLOGY (1, 2, or 3).
Systematic reviews of theoretical and experimental studies in psychopathology, animal neuroses, and related topics.
Either semester, as announced. Staff.

330. SEMINAR IN QUANTITATIVE PSYCHOLOGY (1, 2, or 3).
A seminar either on a particular topic to be announced or on a variety of developments in quantitative psychology.
Either semester, as announced. Staff.

341. ADVANCED RESEARCH (3).
Six laboratory hours a week, fall or spring. Laboratory fee, $3.00. Staff.

SCHOOL OF PUBLIC HEALTH

Professors: E. G. McGAVRAN, *H. G. BAITY, D. M. BISSELL, A. H. BRYAN, S. S. CHIPMAN, B. G. GREENBERG, RUTH W. HAY, R. W. HOWELL, J. E. LARSH, JR., LUCY S. MORGAN, J. J. WRIGHT, EUNICE N. TYLER
Visiting Professor: O. L. PETERSON
Research Professors: H. J. MAGNUSON, W. W. CORT
Associate Professors: MARGARET BLEE, J. C. CASSEL, E. T. CHANLETT, G. O. DOAK, MARGARET B. DOLAN, GERALDINE GOURLEY, M. L. GRANSTROM, J. R. HENDRICKS, G. L. KELSO, ROSEMARY M. KENT, FRANCES MACKINNON, ELTA MAE MAST, D. A. OKUN, JEAN I. REBENTISCH, HENRY TAUBER
Visiting Associate Professors: DERWIN COOPER, J. W. R. NORTON
Assistant Professors: L. D. FREEDMAN, G. W. LAWTON, CHARLOTTE P. MCLEOD, JOSEPH PORTNOY, HARRY SMITH, JR., J. D. THAYER
Visiting Assistant Professors: O. D. GARVIN, R. M. LIGON, JR.
Instructors: G. R. CANNEFAX, ALPHA K. KENNY
Visiting Instructor: EDITH P. BROCKER
Part-time Instructor: HILTON GOULSON
Teaching Fellow: †GEORGE GOSS SMITH
Graduate Assistants: R. L. ELDER, M. H. IVEY, C. W. KIM, JAY R. CARVER
Research Assistants: EDMUND GEHAN, CAROLINE SASSER, M. E. TURNER, JR.

Students other than those in schools of the Division of Health Affairs must obtain permission from their deans before registering for any course in public health. Students in schools of the Division

* Absent on leave, 1954-1955.
† State Board of Health Teaching Fellow.

of Health Affairs are exempted from the payment of the laboratory fees listed in the following course descriptions.

For further information see the special catalogue of the School of Public Health.

Courses for Undergraduates

P.H. 110ab. PRINCIPLES OF PUBLIC HEALTH (8).
Three lecture and two laboratory hours a week, fall; two lecture and four laboratory hours a week, spring. Mrs. Kent and Mrs. Tyler.

P.H. 16. METHODS AND MATERIAL IN TEACHING IN PUBLIC HEALTH EDUCATION (Education 93) (3).
Four lecture and four laboratory hours a week, period one, spring.* Miss Mast.

P.H. 17. STUDENT TEACHING IN COMMUNITY HEALTH EDUCATION (Education 94) (9).
Period two, spring. Fee, $20.00. Mrs. Kent and Miss Mast.

P.H. 18. ENVIRONMENTAL SAFETY AND FIRST AID (2).
Four lecture hours a week, period one, spring. Mrs. Kent.

P.H. 19. SCHOOL AND COMMUNITY ORGANIZATION FOR HEALTH EDUCATION (4).
Three lecture and two demonstration hours a week, fall. Miss Morgan and Mrs. Kent.

P.H. 90. BASIC HEALTH SCIENCES (4).
Three lecture and two laboratory hours a week, fall. Messrs. Chanlett, Hendricks, Kelso, and staff of Department of Biostatistics.

P.H. 91. INTRODUCTION TO EPIDEMIOLOGY AND ACUTE COMMUNICABLE DISEASE CONTROL (1½). Corequisite, P.H. 90 or equivalent.
Three lecture hours a week, period two, fall. Dr. McGavran.

Courses for Graduates and Advanced Undergraduates

P.H. 102ab. PUBLIC HEALTH PRINCIPLES AND PRACTICE (a, 1; b, 3).
Three lecture hours a week, period one, fall; six lecture hours a week, period two, fall. Dr. McGavran and staff of School of Public Health.

P.H. 102c. SEMINAR IN PUBLIC HEALTH PRACTICE (1½). Prerequisites, P.H. 102ab, P.H. 103ab.
Three seminar hours a week, period one, spring. Drs. McGavran and Wright, Misses Morgan and Hay, and members of their staffs.

P.H. 103ab. APPLIED PUBLIC HEALTH PRINCIPLES AND PRACTICES (1-1½). Corequisite, P.H. 102ab.
Three to six laboratory hours a week, period one; six laboratory hours a week, period two, fall. Laboratory fee, $10.00. Dr. McGavran and the staff of School of Public Health.

P.H. 114. MENTAL HEALTH (1½).
Three lecture hours a week, period one, spring. Dr. Howell.

P.H. 115. INTRODUCTION TO PUBLIC HEALTH EDUCATION (2).
Three hours of lecture and demonstration a week, fall; six hours of lecture and demonstration a week, period one, spring. Professor Morgan, staff.

* Throughout this section of the catalogue the word *period* will be used to signify the first or second half of the semester.

P.H. 118. HEALTH AND SICKNESS IN MODERN SOCIETY (2).
Four lecture hours a week, period one, spring. Dr. Bissell.

P.H. 121. PUBLIC HEALTH STATISTICS (2½).
Three lecture and four laboratory hours a week, period one, fall. Laboratory fee, $3.00. Mr. Greenberg.

P.H. 123. STATISTICAL ANALYSIS I (Statistics 111) (4).
Two lecture and four laboratory hours a week, fall. Laboratory fee, $3.00. Mr. Greenberg.

P.H. 124. STATISTICAL ANALYSIS II (Statistics 112) (4).
Two lecture and four laboratory hours a week, spring. Laboratory fee, $3.00. Mr. Greenberg.

P.H. 131. PARASITISM AND HUMAN DISEASE (2½). Prerequisites, Zoology 41, 42 or equivalent.
One lecture and three laboratory hours a week, fall. Laboratory fee, $4.00. Messrs. Larsh, Hendricks.

P.H. 135. HUMAN PARASITOLOGY (2½). Prerequisites, P.H. 131, or Zoology 41, 42, or equivalent.
One lecture and three laboratory hours a week, fall. Laboratory fee, $3.00. Messrs. Larsh, Hendricks, assistants.

P.H. 140. PUBLIC HEALTH PROBLEMS (1½-3).
Three to six hours a week, fall and spring. Staff of School of Public Health.

P.H. 141. PUBLIC HEALTH NUTRITION (2).
Four lecture hours a week, period one, spring. Miss MacKinnon.

P.H. 148. ELEMENTARY BIOCHEMISTRY AND NUTRITION (Biochemistry 108) (3). Prerequisites, Chemistry 61, 62 or equivalent.
Three lecture hours a week, spring. Dr. Andrews, staff; Dr. Bryan, staff.

P.H. 153. PROBLEMS IN MATERNAL AND CHILD HEALTH (2).
Two semester hours a week, spring. Dr. Chipman, Miss Rebentisch, Miss Gourley.

P.H. 158. GROWTH AND DEVELOPMENT (2).
Three lecture and two demonstration hours a week, period one, spring. Miss Rebentisch.

P.H. 161. THE PRINCIPLES OF SANITATION (2).
Three lecture hours a week and five three-hour laboratory sessions, period one, fall. Mr. Chanlett.

P.H. 162. SANITARY CHEMISTRY AND BIOLOGY (3). Prerequisite, General Chemistry.
Three lecture hours a week, fall. Mr. Granstrom.

P.H. 163. ANALYTICAL METHODS IN SANITARY CHEMISTRY AND BIOLOGY (2). Corequisite, P.H. 162.
Two lecture and two laboratory hours a week, period one, fall; two lecture and four laboratory hours a week, period two, fall. Laboratory fee, $5.00. Mr. Granstrom.

P.H. 165. ENVIRONMENTAL SANITATION METHODS (2½). Prerequisites or corequisites, P.H. 102ab, 131, 161.
Three lecture and four laboratory hours a week, period one, spring. Laboratory fee, $3.50. Mr. Chanlett.

P.H. 181. PUBLIC HEALTH PROBLEMS IN INDUSTRY (2). Prerequisite, P.H. 102ab.
Four hours a week, period one, spring. Mr. Chanlett.

P.H. 190. PRINCIPLES AND PRACTICES OF PUBLIC HEALTH NURSING (3).
Three hours a week, fall. Miss Hay, Mrs. Dolan.

P.H. 191. PUBLIC HEALTH NURSING ORGANIZATION AND ADMINISTRATION (3). Prerequisite, P.H. 190, or equivalent.
Six lecture hours a week, period one, spring. Miss Hay, Mrs. Dolan.

P.H. 192. GROUP WORK: ITS INTERPRETIVE FACTORS (2).
Four lecture hours a week, period one, spring. Miss Blee.

P.H. 193. APPLIED PUBLIC HEALTH NURSING FIELD PRACTICE (8).
Five and one-half days a week, period two, spring. Misses Hay, Blee, Mrs. Dolan, public health nursing supervisors of teaching centers.

P.H. 195. THE PUBLIC HEALTH NURSE IN A MATERNAL HEALTH PROGRAM (3).
Three lecture hours a week, fall. Miss Blee.

P.H. 196. SPECIAL FIELDS IN PUBLIC HEALTH NURSING (6). Prerequisites, two of the following P.H. Nursing courses: P.H. 190, 191, 192, 195 or permission of the instructor.
Twenty-two lecture hours a week for five weeks, summer session. Misses Hay, Blee.

P.H. 197. PHILOSOPHY AND PRINCIPLES OF SUPERVISION IN PUBLIC HEALTH NURSING (3). Prerequisite, public health nursing experience or permission of instructor.
Three lectures a week, fall. Mrs. Dolan.

Courses for Graduates

P.H. 201 EPIDEMIOLOGY (3).
Three lecture, demonstration, and seminar hours a week, spring. Drs. McGavran, Wright.

P.H. 202. TUBERCULOSIS CONTROL METHODS (2). Prerequisite, medical degree.
Two lecture and four demonstration hours a week, period two, fall. Drs. Wright, Cooper and Willis.

P.H. 203. STATISTICAL METHODS IN EPIDEMIOLOGY (2). Prerequisites, P.H. 102ab, P.H. 121.
One lecture and two laboratory hours a week, spring. Drs. Wright, McGavran, Mr. Greenberg.

P.H. 204. THE CONTROL OF ACUTE COMMUNICABLE DISEASE (2). Prerequisite, medical degree.
Two lecture hours a week, spring. Drs. McGavran, Chipman and visiting professors.

P.H. 206. VENEREAL DISEASE CONTROL METHODS (2). Prerequisite, medical degree.
Four lecture hours a week, period one, spring. Dr. Magnuson.

P.H. 211. PUBLIC HEALTH ADMINISTRATION (3). Prerequisite, P.H. 102ab.
Three lecture and four or more field-trip hours a week, spring. Dr. Wright.

P.H. 212. THE PLANNING OF ENVIRONMENTAL SANITATION PROGRAMS (2). Prerequisites, P.H. 102ab, 161.
Three lecture and two laboratory hours a week, period two, spring. Mr. Chanlett.

P.H. 213. MEDICAL CARE (2). Prerequisite, P.H. 118.
Three seminar hours a week, period two, spring. Dr. Bissell.

P.H. 215. COMMUNITY ORGANIZATION FOR HEALTH EDUCATION (2).
Six lecture and demonstration hours a week, period one, spring. Miss Morgan, visiting lecturers.

P.H. 216. FIELD WORK IN PUBLIC HEALTH EDUCATION (8). This course is open only to students majoring in health education.
Period two, spring. Miss Morgan, Mrs. Tyler, Mrs. Kent, Miss Mast, health education counselors of training centers.

P.H. 217abc. PROBLEMS IN HEALTH EDUCATION (1½-3). Prerequisites to be arranged with faculty adviser in each individual case.
Two lecture hours a week, period one, and four lecture and demonstration hours a week, period two, fall; six lecture and demonstration hours a week, period one, spring and summer. Mrs. Tyler, visiting lecturers.

P.H. 219. SCHOOL HEALTH EDUCATION (2).
Two lecture hours a week, period one, fall; four lecture and demonstration hours a week, period two, fall. Miss Mast, visiting lecturers.

P.H. 220. INTRODUCTION TO SPECIAL FIELDS IN PUBLIC HEALTH EDUCATION (6). Prerequisite, P.H. 115, or 215.
Twelve lecture and laboratory hours a week, summer session. Mrs. Kent.

P.H. 221. THE ROLE OF VITAL STATISTICS IN ADMINISTRATION (2). Prerequisite, P.H. 121.
Two lecture hours a week, spring. Mr. Greenberg.

P.H. 222. FIELD WORK IN PUBLIC HEALTH STATISTICS (8). Prerequisites, P.H. 121 and P.H. 221.
Summer session. Mr. Greenberg, statistical consultants in state health departments.

P. H. 232. PARASITOLOGICAL METHODS (4). Prerequisite, P.H. 135.
Two lecture and four laboratory hours a week, spring. Laboratory fee, $8.00. Mr. Hendricks, assistants.

P.H. 233. MALARIOLOGY (3). Prerequisites, P.H. 131, or Zoology 41, 42, or equivalent.
Two lecture and two laboratory hours a week, spring. Laboratory fee, $4.00. Messrs. Larsh, Granstrom, Hendricks, assistants.

P.H. 234. MEDICAL ENTOMOLOGY AND INSECT CONTROL (2½). Prerequisites, Zoology 41, 42, and P.H. 135, or equivalent.
One lecture and three laboratory hours a week, spring. Laboratory fee, $4.00. Mr. Hendricks, assistants.

P.H. 241. PRINCIPLES OF PUBLIC HEALTH NUTRITION (2).
Four lecture hours a week, period one, spring. Dr. Bryan, Miss MacKinnon.

P.H. 242ab. ADVANCES IN HUMAN NUTRITION (1-2). Prerequisite, a major in nutrition, or equivalent courses in biochemistry and physiology.
Two lecture hours a week, period two, fall; four lecture hours a week, period one, spring. Dr. Bryan.

P.H. 243. PROGRAMS IN PUBLIC HEALTH NUTRITION (3). Prerequisite, P.H. 242.
A course for students majoring in the field.
Six lecture hours a week, period one, spring. Miss MacKinnon.

P.H. 244. FIELD WORK IN PUBLIC HEALTH NUTRITION (8). Prerequisite, P.H. 243.
Open only to students majoring in the field.
Spring. Miss MacKinnon, nutrition consultants in state health departments.

P.H. 245. SEMINAR IN PUBLIC HEALTH NUTRITION (2). Prerequisites, P.H. 242, 243, or equivalent.
Open only to students majoring in the field.
Summer session. Miss MacKinnon.

P.H. 246. THE NUTRITION SURVEY (2). Prerequisite, P.H. 242, or equivalent.
Summer session. Dr. Bryan, Miss MacKinnon.

P.H. 249. WORKSHOP IN PUBLIC HEALTH NUTRITION (2-6).
Open by special permission to a limited number of qualified graduate students.
Fall and spring. Dr. Bryan, Miss MacKinnon.

P.H. 250a. MATERNAL AND CHILD HEALTH (3).
A seminar course dealing with the influence of the family on maternal and child health, maternal health, and needs of the newborn and young infant.
Six seminar hours a week, spring. Dr. Chipman, Misses Rebentisch and Gourley.

P.H. 250b. MATERNAL AND CHILD HEALTH (3). Prerequisite, P.H. 250a.
This portion of the course deals with the needs and problems encountered in infancy, preschool and school age children, adolescents, and handicapped children.
Six seminar hours a week, spring. Dr. Chipman, Misses Rebentisch and Gourley.

P.H. 251. PROGRAMS AND SERVICES IN MATERNAL AND CHILD HEALTH (2).
Seminar course designed for students majoring in maternal and child health, and organized around the characteristics and needs of mothers and children as discussed in P.H. 250a, 250b.
Four seminar hours a week, spring. Dr. Chipman, Misses Rebentisch and Gourley.

P.H. 252abc. CLINICAL TRAINING IN MATERNAL AND CHILD HEALTH (1 each).
Planned on the basis of individual student interest and need. Offered concurrently with P.H. 250, 251.
One seminar and two laboratory hours a week. Dr. Chipman, Misses Rebentisch and Gourley.

P.H. 253. SOCIAL WELFARE AND PUBLIC HEALTH (1).
Two lecture hours a week, spring. Miss Gourley.

P.H. 254. SOCIAL AND PSYCHOLOGICAL PROBLEMS OF CHILDREN (2).
Two lecture hours a week, spring. Dr. Chipman, staff, and guest lecturers.

P.H. 255. FIELD TRAINING OR EXPERIENCE IN MATERNAL AND CHILD HEALTH (2-8).
For majors in maternal and child health.
Fall and spring. Dr. Chipman.

P.H. 258. MATERNAL AND CHILD HEALTH (3).
An introductory course in maternal and child health for physicians and selected non-medical students.
Three seminar hours a week, fall. Dr. Chipman, Misses Rebentisch and Gourley.

P.H. 261. MILK AND FOOD CONTROL (2½). Prerequisites, P.H. 102ab, 131, and 161.
Three lecture and four laboratory hours a week, period two, spring. Laboratory fee, $3.50. Mr. Chanlett.

P.H. 262. LIMNOLOGY AND STREAM POLLUTION (3). Prerequisites, P.H. 162 and 163.
Two lecture and two laboratory hours a week, spring. Laboratory fee, $4.00. Mr. Okun.

P.H. 264. CHEMISTRY AND BIOLOGY OF WATER AND WASTE TREATMENT PROCESSES (5). Prerequisites, P.H. 162, 163.
Three lecture and four laboratory hours a week, spring. Laboratory fee, $5.00. Mr. Granstrom.

P.H. 272. WATER SUPPLY AND SEWERAGE (5). Prerequisite, engineering degree.
Four lecture and two laboratory hours a week, fall. Laboratory fee, $4.00. Mr. Okun.

P.H. 273. WATER PURIFICATION, SEWAGE TREATMENT AND DISPOSAL (5). Prerequisites, P.H. 162, 163, 272; corequisite, P.H. 264.
Four lecture and two laboratory (design) hours a week, spring. Laboratory fee, $4.00. Mr. Okun.

P.H. 275. INDUSTRIAL WATER SUPPLY AND LIQUID WASTES. (3). Prerequisites, P.H. 162, 163; corequisite, P.H. 264.
Three lecture hours a week, spring. Mr. Granstrom.

P.H. 281. INDUSTRIAL HYGIENE AND SANITATION (2½). Prerequisites, P.H. 162, 181, or with permission of instructor.
Three lecture and four laboratory hours a week, period two, spring. Laboratory fee, $3.00. Mr. Chanlett.

P.H. 297. ADVANCED SUPERVISION IN PUBLIC HEALTH NURSING (3). Prerequisites, P.H. 197, or equivalent.
For majors in public health nursing supervision.
Six hours a week, period one, spring. Mrs. Dolan.

P.H. 298. SEMINAR IN PUBLIC HEALTH NURSING SUPERVISION (6).
Course devoted to the study of problems in public health nursing practice and the development of a project in public health nursing education or service.
A total of 40 hours of seminars and 160 hours of field practice, period two, spring. Mrs. Dolan, Miss Hay.

Research Courses

P.H. 301. RESEARCH IN EPIDEMIOLOGY (1½ or more).
A research course for those qualified to do independent investigation under supervision. Admission to this course is granted only after consultation with the instructor, who must assign or approve the subject of research. A student may spend part or all of his time in research.
Three or more laboratory hours a week. Drs. McGavran, Wright.

P.H. 306. RESEARCH IN VENEREAL DISEASE (1½ or more).
Properly qualified students may work on laboratory problems in the venereal disease field. Admission to this course is granted only after consultation with the instructor.
Three or more laboratory hours a week, fall and spring. Dr. Magnuson.

P.H. 311. RESEARCH IN PUBLIC HEALTH ADMINISTRATION (1½ or more).
Three or more laboratory hours a week. Drs. Wright, McGavran.

P.H. 314. SEMINAR ON THE ORGANIZATION AND ADMINISTRATION OF SCHOOL AND COMMUNITY HEALTH EDUCATION (3).
Open by special arrangement to students doing advanced graduate work. Directed readings and reports.
Three hours a week, fall and spring. Miss Morgan, Mrs. Tyler, Mrs. Kent.

P.H. 315. RESEARCH IN HEALTH EDUCATION (1½ or more).
Open by special arrangement to students doing advanced graduate work in public health education.
Three or more laboratory hours a week, fall and spring. Miss Morgan, Mrs. Tyler, Mrs. Kent.

P.H. 316. FIELD TRAINING IN HEALTH EDUCATION (3 or more).
By special arrangement for advanced graduate students.
Period to be arranged, fall and spring. Miss Morgan, Mrs. Tyler, Mrs. Kent.

P.H. 317ab. SEMINAR IN HEALTH EDUCATION (3 each semester).
Open by special arrangement to students doing advanced graduate work.
Three hours a week, fall and spring. Miss Morgan, Mrs. Tyler, Mrs. Kent.

P.H. 318abc. SEMINAR IN PUBLIC HEALTH ADMINISTRATION (1 each).
Two hours a week, period two, fall; periods one and two, spring. Dr. Wright and staff.

P.H. 321. RESEARCH IN STATISTICS (1½ or more).
Individual arrangements may be made by the advanced student to spend part or all of his time in supervised investigation of selected problems in statistics.
Three or more laboratory hours a week. Mr. Greenberg.

P.H. 332. RESEARCH IN PARASITOLOGY (1½ or more).
Open to advanced students. Research problems in parasitology, especially in the field of experimental immunology of parasitic infections, are considered.
Three or more laboratory hours a week. Laboratory fee, $15.00. Mr. Larsh.

P.H. 341. RESEARCH IN PUBLIC HEALTH NUTRITION (1½ or more).
A research course for those qualified to do independent field or laboratory investigation under supervision.
Three or more laboratory hours a week. Dr. Bryan.

P.H. 361. RESEARCH IN SANITARY SCIENCE. (1½ or more). Prerequisites or corequisites, P.H. 131, 161, 162, 163 and courses appropriate to problem from P.H. 201, 203, 233, 234, 261, 264.

Three or more laboratory hours a week. Laboratory fee, $10.00. Messrs. Chanlett, Granstrom, Okun, Lawton.

P.H. 371. RESEARCH IN SANITARY ENGINEERING (1½ or more). Prerequisites or corequisites, P.H. 162, 163, 264, 272, 273.

Three or more laboratory hours a week. Laboratory fee, $10.00. Messrs. Chanlett, Granstrom, Okun, Lawton.

P.H. 381. RESEARCH IN INDUSTRIAL SANITATION (1½ or more). Prerequisite or corequisite, P.H. 281.

Three or more laboratory hours a week. Laboratory fee, $10.00. Messrs. Chanlett, Lawton.

*DEPARTMENT OF RADIO, TELEVISION, AND MOTION PICTURES

Professor: EARL WYNN
Associate Professor: †R. F. SCHENKKAN
Assistant Professors: J. S. CLAYTON, J. M. EHLE, JR., WESLEY WALLACE
Instructor: ROSS SCROGGS
Lecturer: JOHN YOUNG

Interests of students pursuing a major in the Department of Radio, Television, and Motion Pictures fall under the following categories: (1) writing; (2) speaking or acting; (3) the planning of programs; (4) the production of programs; (5) ‡commercial aspects of the media; and (6) the operation of equipment.

The course work, laboratories, and extracurricular activities of the Department are planned with three objectives in mind: to give the student an opportunity to secure a broad educational background; to provide him with a survey of the media; and to offer him an opportunity to explore those phases of radio, television, and motion pictures in which he is most talented. Our aim is to help prepare the student first as a thoughtful, responsible human being and second as a skillful artist, teacher, and/or practitioner.

Certain aptitudes and backgrounds on the part of the student are necessary to his successful pursuit of the RTVMP major. Attempts to discover these backgrounds and aptitudes are made through a qualifying examination taken the first semester of the sophomore year, observations of the student's extracurricular activities in radio, television, and motion pictures especially during his freshman year, most careful observation of all classroom and laboratory work, and private confer-

* See the Graduate School catalogue for information concerning the graduate program of the Department of Radio, Television, and Motion Pictures.

† Absent on leave.

‡ A student may major in the School of Business Administration and take his non-divisional electives in the Department of Radio, Television, and Motion Pictures. See the special bulletin of the School of Business Administration.

ences with his advisor and instructors. A student who plans to major in the Department of Radio, Television, and Motion Pictures is advised to take RTVMP 58 during the first semester of his sophomore year and RTVMP 59 during the second semester of his sophomore year.

Requirements for the B.A. degree with a major in radio, television, and motion pictures consist of a minimum of twenty courses beyond the General College requirements, six of which are required in the major field.

Upon the recommendation of the departmental advisor, the student shall elect *five to nine courses in allied departments of the Division of the Humanities; and five to nine courses from other divisions.*

Students interested in working for *Honors* or *Highest Honors* in the field of writing or in other aspects of radio, television, and motion pictures should see the Chairman of the Department at the end of the sophomore year and not later than the registration period for the first semester of the senior year. (See p. 126, and p. 127.)

Candidates for Honors will be permitted to take seven courses toward the major instead of the regularly required six courses.

Courses for Undergraduates

RTVMP 58. INTRODUCTION TO RADIO AND TELEVISION, PART I (3). Basically a two-semester course, Introduction to Radio and Television is designed to provide a broad survey of the historical, social, cultural, and economic aspects of broadcasting. The first semester deals specifically with definitions of broadcasting, discussions of the importance of radio and television in American society, historical development of the forms of broadcasting, the organization and classification of broadcasting stations and networks, the role of "public interest" in broadcasting, comparisons of the American broadcasting system with those used by other nations, and a survey of broadcasting career opportunities.

Fall and spring. Mr. Wallace.

RTVMP 59. INTRODUCTION TO RADIO AND TELEVISION, PART II (3). Prerequisite, RTVMP 58.

A continuation of the survey of the historical, social, cultural, and economic aspects of broadcasting, with emphasis on the study of agencies and institutions most nearly identified with the economic aspects, surveys of audience characteristics and factors which influence program structures, considerations of relationships between broadcasters and advertisers, and a study of station programming policies, planning, and operation.

Fall and spring. Mr. Wallace.

*RTVMP 76. RADIO PRODUCTION ARTS (4). Open to radio, television and motion pictures and dramatic art majors only.

A study of the principles and methods of radio production and direction.

Two lecture and four laboratory hours a week, fall and spring. Fee for materials, $5.00. Messrs. Clayton, Young.

* Only two of these courses may be counted as a part of the requirements of the major.

*RTVMP 77. TELEVISION PRODUCTION ARTS (4). Open to radio, television and motion pictures and dramatic art majors only.

A study of the principles and methods of television production and direction.

Two lecture and four laboratory hours a week, fall and spring. Fee for materials, $5.00. Messrs. Clayton, Young.

RTVMP 78. WRITING FOR RADIO, TELEVISION, AND MOTION PICTURES, PART I (3). Non-majors wishing to register for this course must have permission of the instructor.

A basic course dealing chiefly with drama in which the student writes two dramatic scripts, does routine continuity for radio and television, and completes a special writing project which he selects in consultation with the instructor.

Fall and spring. Messrs. Ehle, Clayton.

RTVMP 79. WRITING FOR RADIO, TELEVISION, AND MOTION PICTURES, PART II (3). Prerequisite, RTVMP 78. Non-majors wishing to register for this course must have permission of the instructor.

A continuation of RTVMP 78.

Fall and spring. Messrs. Ehle, Clayton.

*RTVMP 87. MOTION PICTURE PRODUCTION ARTS (4). Open to radio, television and motion pictures and dramatic art majors only.

Permission of the instructor must be secured. Physics 45, Photography, is highly recommended as a prerequisite for this course, which is intended primarily for students majoring in radio, television, motion pictures or dramatic art.

A study of the principles and methods of motion picture production and direction.

Two lecture and four laboratory hours a week, spring. Fee for materials, $5.00. Messrs. Scroggs, Wynn.

RTVMP 99. †COURSE FOR HONORS (3). Permission of the Chairman of the Department must be secured.

Reading, and the preparation of an essay for Honors or the preparation of a creative work or works for Honors in Writing in radio, television or motion pictures under the direction of a departmental advisor. This is a two-semester course. Credit will not be awarded until the end of the second semester of work.

Fall and spring. Mr. Ehle and members of the Department of Radio, Television, and Motion Pictures staff.

DEPARTMENT OF RELIGION

Professors: BERNARD BOYD, A. S. NASH, J. P. HARLAND, A. C. HOWELL, P. H. EPPS
Assistant Professors: EMMANUEL GITLIN, W. H. POTEAT

The first function of the department is to further an understanding of the origin, development, and significance of the Judaic-Christian tradition. Thus the department is primarily concerned with the Biblical literature, the history of religious thought, and the implications of Christianity for current thought and practice. The department seeks further to relate the study of the Bible and religion to the work of other departments in the belief that Christianity is relevant to the

* Only two of these courses may be counted as a part of the requirements of the major.
† See the Program for Honors Work in the Division of the Humanities.

whole of knowledge. For this reason, courses in religion are offered not only by instructors within the department, but by others in related fields.

Any student who plans to major in religion should consult with the department chairman as early as possible to insure proper arrangement of his course of study. If, for instance, the student plans further study at a seminary or graduate school, he will want his program to accord with recommendations of the American Association of Theological Schools. If, on the other hand, the student is in the School of Education, he will want to qualify for accreditation for high school teaching of religion along with some other subject. However, many who seek a major in religion may not plan to follow either of these courses professionally and use the services of the department to gain through their liberal arts education an aptitude for church leadership. Students who intend to find employment in such diverse fields as agriculture, industry or commerce, but who do not desire to work on a professional degree during their undergruadate years, may choose to major in religion. Consequently, there is no fixed set of courses for an undergraduate major. Each student, after taking the basic courses, Religion 28 and Religion 30, builds on this foundation a program of study appropriate to his present needs. For example, a major in religion for a student whose primary interest is in education, whether in school or church, will consist of the following courses in the department: 31, 45, 80, 81, 95 and 103.

Programs of study leading to M.A. and Ph.D. degrees are not presently offered but will be proposed in the future. Plans have already been made for courses of study which provide a minor in religion for M.A. and Ph.D. candidates in other fields. The purpose of such courses is to furnish future teachers of, for example, education or philosophy or sociology with a context of study that will enable them to see the place of their special field of interest in a Christian view of man, history and society.

Courses for Undergraduates

28. THE ORIGIN AND SIGNIFICANCE OF THE BIBLE (3).
An introduction to the literature of the Bible, with special consideration of the impact of the Hebrew-Christian faith upon modern man as he seeks a religious orientation in the contemporary situation.
Fall and spring. Messrs. Boyd, Gitlin, Nash.

30. THE RELIGIOUS BACKGROUND OF WESTERN CIVILIZATION (3).
A historical study of the impact of the faith of the Old Testament, Graeco-Roman religion, Teutonic religion, and Christianity upon the life and thought of the Western World.
Spring. Mr. Nash.

31. CHRISTIAN ETHICS AND MODERN PROBLEMS (3).
A consideration of the relevance of the Christian faith to problems of war and peace, economic enterprise, marriage and the family, and the function of the state and international organizations in the contemporary scene.
(Not offered in 1955-1956.)

45. CHRISTIANITY AND THE RELIGIONS OF THE WORLD (3).
A study of the Christian faith as compared to and contrasted with classical religions, such as Hinduism, Confucianism, Buddhism, Mohammedanism, and also the new political religions, such as Communism and Nationalism.
Fall and spring. Mr. Nash.

52. PHILOSOPHY OF RELIGION (Philosophy 52) (3). This course can be taken for credit in religion only by students majoring in religion.
An analysis will be made of the essential elements of religious thought and practice. Problems of knowledge and faith, the existence and nature of God, and the significance of religion for the individual and society will be considered.
Fall and spring. Mr. Poteat.

80. THE MAKING AND MEANING OF THE OLD TESTAMENT (3). Prerequisite, Religion 28.
A study of the beginnings of Hebrew religion in the Mosaic period, the rise of classical prophecy, and the emergence of Judaism.
Fall and spring. Messrs. Boyd and Gitlin.

81. THE MAKING AND MEANING OF THE NEW TESTAMENT (3). Prerequisite, Religion 28.
A course designed to help the student gain an appreciation of both the newness of the Christian religion and its continuity with Israel's historic faith.
Fall and spring. Messrs. Boyd and Gitlin.

85. ARCHAEOLOGY AND THE BIBLE (Classics 85) (3).
The results of the exploration and excavations in Palestine will be studied for the light they throw on Biblical history. Attention will be given to the art and civilization of the peoples of the Old Testament, particularly of the pre-exilic period.
Fall. Mr. Harland.

87. LITERARY ASPECTS OF THE BIBLE (English 87) (3).
A study of the literary aspects of the Bible in English translation, with discussion of types and forms of literature, historical development of the Bible, the principal translations, and the influence of the Bible on English literature and on the language.
Spring. Mr. Howell.

92. THE VARIETIES OF RELIGION IN AMERICAN LIFE AND CULTURE (3).
A study of Judaism, Roman Catholicism, and the chief forms of Protestantism; their respective beliefs, forms of worship, polity, and moral and social teachings.
(Not offered in 1955-1956.)

93, 94. COURSES FOR HONORS (3 each semester). Required of all students reading for honors in religion.
Fall and spring.

95. THE RELATIONS BETWEEN SCIENCE AND RELIGION (3).
This course will be concerned with the mutual influence of natural science and religion upon each other in Western civilization from 1500 to the present day.
Spring. Mr. Nash.

97. THE CHRISTIAN INTERPRETATION OF HISTORY (3).
The course, beginning with a study of the nature of history and the development of historiography, goes on to consider the attempts made by thinkers like Nicholas Berdyaev, Reinhold Niebuhr, Christopher Dawson, and Arnold Toynbee to arrive at a Christian interpretation of the historical process, in so far as it sheds light on the contemporary crisis.
Mr. Nash.

99. THE INFLUENCE OF THE BIBLE ON WESTERN THOUGHT (3). Prerequisite, Religion 28 or 30.
A historical study of the influence of the Bible on the thought and imagination of Western civilization as expressed in its philosophy, art, political theory, and literature.
Mr. Boyd.

Courses for Graduates and Advanced Undergraduates

103. CHRISTIANITY AND EDUCATION (3). Prerequisite, Religion 30 or 45 or special permission.
This course, which is primarily but not exclusively intended for students of education, will consist of a historical and comparative study of the relations between Christianity and education since the Reformation.
Spring. Mr. Nash.

121. THE BIBLICAL PERSPECTIVE (3). Prerequisite, Religion 28 or special permission.
A systematic consideration of the central themes of the Bible, such as revelation, sin, judgment, salvation, in relation to an understanding of man, society, ethical obligation, and history. The tension between the Biblical *Weltanschauung* and other world views will be considered in terms of various contemporary problems.
Spring. Mr. Boyd.

152. AUGUSTINE AND AQUINAS (Philosophy 152) (3). Prerequisite, Philosophy 56 or 150 or 151 or special permission.
A study of the philosophy of Augustine and Aquinas; their theories of God, Nature, Man, and the State; their significance for modern man.
(Not offered in 1955-1956.)

158. GREEK NEW TESTAMENT (Classics 158) (3). Prerequisite, Greek 21-22 or equivalent.
One or more of the Gospels will be read, with attention to the grammar, diction, and style of the New Testament writers.
Mr. Epps.

Courses for Graduates

270. SOCIOLOGY OF RELIGION (Sociology 270) (3).
An analysis of tensions between the scientific, ethical and theological study of society; the role of religion in social change; the social origins of the denominations; the sociological significance of the Reformation; "sect" and "church" in sociological theory.
Fall. Mr. Nash.

DEPARTMENT ROMANCE LANGUAGES

Professors: S. A. STOUDEMIRE, *W. M. DEY, S. E. LEAVITT, U. T. HOLMES, JR., N. B. ADAMS, H. R. HUSE, J. C. LYONS, *Secretary*, W. L. WILEY, †H. GIDUZ, R. W. LINKER, A. G. ENGSTROM

Associate Professors: ‡H. H. STAAB, §J. HARDRÉ, J. E. KELLER, F. M. DUFFEY, W. A. MCKNIGHT

Assistant Professor: J. C. HUTCHINSON

Instructor: L. A. SHARPE

Part-time Instructors: F. A. S. ANNAS, W. A. ARMFIELD, J. H. DAVIS, DALE DAWLEY, S. D. DUNCAN, W. N. FERRIS, A. B. GMINDER, H. S. HACKNEY, A. R. HARDEN, G. W. HUDSON, J. H. LAPRADE, Q. E. MARTÍNEZ, W. H. MYER, S. H. NEWELL, JR., W. W. RITTER, B. M. RUSSELL, R. L. SCHURFRANZ, J. E. WHITE, K. R. WILSON-JONES

Teaching Fellows: J. O. MOORE, E. M. PARTIN, D. P. RIPLEY

Graduate Assistant: HESTER POOLE MATTHEWS

FRENCH

Students interested in having a major in French will please consult Mr. J. C. Lyons, Departmental Adviser.

Those students who plan to teach in public high schools should read the statement on page 136.

The course requirements for the A.B. degree with a major in French are as follows: French 50, 51, 52, 53, 71, 72, 120, 145. This program may be varied according to the student's special needs and preparation.

Courses for Undergraduates

1-2 ELEMENTARY FRENCH (6).

Three hours a week, through two semesters. Mr. Hutchinson and staff.

NOTE: No student is permitted to take French 1, 2, 3, or 4 and Spanish 1, 2, 3, or 4 at the same time.

Attention is called to French 14-15, designed for advanced students who have fulfilled the requirements in another foreign language.

¶3-4. INTERMEDIATE FRENCH (6).

Three hours a week, through two semesters. Mr. Hutchinson and staff.

14, 15. BEGINNING COURSE FOR ADVANCED STUDENTS (3 each). Elective.

Three hours a week, fall and spring. Messrs. Hardré, Hutchinson.

21. ADVANCED FRENCH (3). Sophomore elective.

Masterpieces of French literature.

Any semester. Messrs. Lyons, Wiley, Linker, Engstrom, Hardré.

22. ADVANCED FRENCH (3). Sophomore elective.

Contemporary French literature.

Any semester. Messrs. Lyons, Wiley, Linker, Engstrom, Hardré.

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* Kenan Professor Emeritus.
† Professor Emeritus.
‡ Associate Professor Emeritus.
§ Kenan leave of absence, spring semester, 1955.
¶ Either of these courses may be taken separately for elective credit if the language requirement has already been satisfied.

50. ADVANCED COMPOSITION, SYNTAX, AND THEME WRITING (3). Prerequisite, intermediate French.
Spring. Messrs. Hardré, Hutchinson.

51. FRENCH CONVERSATION AND COMPOSITION (3).
Any semester. Messrs. Lyons, Hardré.

52. FRENCH CIVILIZATION I (CONVERSATION) (3). Prerequisite, French 51.
Spring. Messrs. Lyons, Hardré.

53. FRENCH CIVILIZATION II (CONVERSATION) (3). Prerequisite, French 52.
French Revolution to the present.
Fall. Mr. Hardré.

71. SURVEY OF FRENCH LITERATURE I (3). Prerequisite, French 21-22. Open to juniors and seniors.
Fall. Messrs. Lyons, Wiley, Engstrom.

72. SURVEY OF FRENCH LITERATURE II (3).
This course is a continuation of French 71. Open to juniors and seniors.
Spring. Messrs. Lyons, Wiley, Engstrom.

83. MATERIALS AND METHODS IN HIGH SCHOOL FRENCH (Education 83f) (3).
Spring. Mr. ————————.

84. DIRECTED TEACHING OF HIGH SCHOOL FRENCH (Education 84f) (3).
Any semester. Laboratory fee, $10.00. Mr. ————————.

97. HONORS COURSE (3).
Required of all students reading for honors in French.

Courses for Graduates and Advanced Undergraduates

115. FRENCH LYRIC POETRY (3). Prerequisites, French 71, 72.
Spring. Mr. Huse.

120. FRENCH LITERATURE OF THE TWENTIETH CENTURY (3). Prerequisites, French 71, 72.
Fall. Mr. Hardré.

126. HISTORY OF THE FRENCH LANGUAGE (3). Prerequisite, French 71, 72.
Spring. Messrs. Holmes, Linker.

131. THE FRENCH DRAMA PRIOR TO 1700 (3). Prerequisites, French 71, 72.
Fall. Mr. Wiley.

132. THE FRENCH DRAMA SINCE 1700 (3). Prerequisites, French 71, 72.
Spring. Mr. Wiley.

145. FRENCH PHONETICS (3). Prerequisites, French 71, 72.
Fall. Mr. Wiley.

171. FRENCH LITERATURE OF THE SEVENTEENTH CENTURY I (3). Prerequisites, French 71, 72.
Fall. Mr. Lyons.

172. FRENCH LITERATURE OF THE SEVENTEENTH CENTURY II (3). Prerequisites, French 71, 72.
Spring. Mr. Lyons.

181. FRENCH LITERATURE OF THE EIGHTEENTH CENTURY (3). Prerequisites, French 71, 72.
Fall. Mr. Huse.

191. FRENCH ROMANTICISM (3). Prerequisites, French 71, 72.
Fall. Mr. Engstrom.

192. FRENCH LITERATURE SINCE 1850 (3). Prerequisites, French 71, 72.
Spring. Mr. Engstrom.

CELTIC 105. OLD IRISH (3).
Spring. Mr. Holmes.

CELTIC 106. OLD WELSH (3).
One semester. Mr. Holmes.

Courses for Graduates

201. MATERIALS AND METHODS OF RESEARCH (1).
Spring. Mr. Holmes.

211. LITERARY CRITICISM IN FRANCE: THE CLASSICAL PERIOD (3).
(1955-1956 and alternate years.) *Spring.* Mr. Wiley.

212. LITERARY CRITICISM IN FRANCE: THE MODERN PERIOD (3).
(1954-1955 and alternate years.) *Spring.* Mr. Engstrom.

220. VULGAR LATIN (3).
(1955-1956 and alternate years.) *Spring.* Mr. Holmes.

221-222. OLD FRENCH (6).
Fall and spring. Mr. Holmes.

225. PROVENÇAL (3).
(1955-1956 and alternate years.) *Spring.* Messrs. Holmes, Linker.

248. FRENCH LITERATURE OF THE FOURTEENTH AND FIFTEENTH CENTURIES (3). Prerequisite, French 221 or 265.
(1955-1956 and alternate years.) *Fall.* Messrs. Holmes, Linker.

265, 266. FRENCH LITERATURE OF THE RENAISSANCE (3 each).
(1954-1955 and alternate years.) *Fall and spring.* Mr. Lyons.

324. ROMANCE PALEOGRAPHY (3).
(1954-1955 and alternate years.) *Spring.* Mr. Linker.

331. HISTORY OF FRENCH LITERATURE PRIOR TO 1300 (3). French 221 is desired, though not prerequisite.
(1955-1956 and alternate years.) *Fall.* Mr. Holmes.

370. SEMINAR IN MINOR ROMANCE TONGUES (3).
(1954-1955 and alternate years.) *Spring.* Mr. Holmes.

395. RESEARCH (3).
Research in a special field under the direction of a member of the department.

ITALIAN

Courses for Undergraduates

51. ELEMENTARY COURSE (3). Prerequisite, intermediate French or Spanish.
Fall. Mr. Lyons.

52. MODERN ITALIAN LITERATURE (3). Prerequisite, Italian 51.
Spring. Mr. Lyons.

Courses for Graduates and Advanced Undergraduates

131. DANTE I (3). Prerequisites, Italian 51, 52.
Fall. Mr. Huse.

132. DANTE II (3). Prerequisite, Italian 131.
Spring. Mr. Huse.

156. DANTE IN ENGLISH TRANSLATION (Comparative Literature 156) (3).
Spring. Mr. Huse.

161. ITALIAN LITERATURE OF THE RENAISSANCE (3). Prerequisites, Italian 51, 52.
(1955-1956 and alternate years.) *Fall.* Mr. Huse.

181. THE ITALIAN SETTECENTO (3). Prerequisites, Italian 51, 52.
A survey of the literature of the eighteenth century in Italy, with an intensive study of Goldoni and Alfieri.
(1955-1956 and alternate years.) *Spring.* Mr. Lyons.

Courses for Graduates

221. OLD ITALIAN (3).
(1954-1955 and alternate years.) *Fall.* Mr. Holmes.

245. THE ITALIAN TRECENTO: PETRARCH AND BOCCACCIO (3). Prerequisites, Italian 51, 52.
(1954-1955 and alternate years.) *Spring.* Mr. Lyons.

PORTUGUESE

Courses for Undergraduates

51. ELEMENTARY PORTUGUESE (3). Prerequisite, intermediate French or Spanish.
Fall. Mr. Sharpe.

52. READING IN BRAZILIAN LITERATURE (3). Prerequisite, Portuguese 51.
Spring. Mr. Sharpe.

Courses for Graduates and Advanced Undergraduates

101. MASTERPIECES OF PORTUGUESE LITERATURE (3). Prerequisite, Portuguese 52 or its equivalent.
(1954-1955 and alternate years.) *Spring.* Mr. Sharpe.

102. MODERN BRAZILIAN LITERATURE (3). Prerequisite, Portuguese 52 or its equivalent.
Fall. Mr. Sharpe.

Course for Graduates

221. OLD PORTUGUESE (3).
(1954-1955 and alternate years.) *One semester.* Mr. Holmes.

SPANISH

Students interested in having a major in Spanish will please consult Mr. S. A. Stoudemire, Departmental Adviser.

Those students who plan to teach in public high schools should read the statement on page 136.

The course requirements for the A.B. degree with a major in Spanish are as follows: Spanish 50, 51, 52, 53, 71, 72, 73, 145. This program may be varied according to the student's special needs and preparation.

Courses for Undergraduates

1-2. ELEMENTARY SPANISH (6).
Three hours a week, through two semesters. Messrs. Duffey, McKnight, and staff.

NOTE: No student is permitted to take Spanish 1, 2, 3, or 4, and French 1, 2, 3, or 4 at the same time.

Attention is called to Spanish 14-15, designed for advanced students who have fulfilled the requirements in another foreign language.

*3-4. INTERMEDIATE SPANISH (6).
Three hours a week, through two semesters. Messrs. Duffey, McKnight, and staff.

14, 15. BEGINNING COURSE FOR ADVANCED STUDENTS (3 each). Elective.
Three hours a week, fall and spring. Messrs. Stoudemire, McKnight.

21. ADVANCED SPANISH (3). Sophomore elective.
Masterpieces of Spanish literature.
Any semester. Messrs. Stoudemire, Leavitt, Adams, McKnight, Duffey.

22. ADVANCED SPANISH (3). Sophomore elective.
Contemporary Hispanic literature.
Any semester. Messrs. Stoudemire, Leavitt, Adams, McKnight, Duffey.

50. ADVANCED COMPOSITION, SYNTAX, AND THEME WRITING (3). Prerequisite, intermediate Spanish.
Spring. Messrs. Stoudemire, McKnight.

51. SPANISH CONVERSATION AND COMPOSITION (3).
Any semester. Mr. Duffey.

52. SPANISH CIVILIZATION (CONVERSATION) (3). Prerequisite, Spanish 51.
Spring. Mr. Duffey.

* Either of these courses may be taken separately for elective credit if the language requirement has already been satisfied.

53. LATIN AMERICAN CIVILIZATION (CONVERSATION) (3). Prerequisite, Spanish 51.
A survey in Spanish of the history and culture of Latin America.
Fall. Mr. Duffey.

71. SURVEY OF SPANISH LITERATURE TO 1700 (3). Prerequisites, Spanish 21-22.
Open to juniors and seniors.
Fall. Messrs. Stoudemire, McKnight.

72. SURVEY OF SPANISH LITERATURE SINCE 1700 (3).
This course is a continuation of Spanish 71. Open to juniors and seniors.
Spring. Messrs. Stoudemire, McKnight.

73. SURVEY OF SPANISH-AMERICAN LITERATURE (3). Prerequisite, Spanish 71, 72. Open to juniors and seniors.
Fall. Mr. Sharpe.

83. MATERIALS AND METHODS IN HIGH SCHOOL SPANISH (Education 83s) (3).
Spring. Mr. ————————.

84. DIRECTED TEACHING OF HIGH SCHOOL SPANISH (Education 84s) (3).
Any semester. Laboratory fee, $10.00. Mr. ————————.

97. HONORS COURSE (3).
Required of all students reading for honors in Spanish.

Courses for Graduates and Advanced Undergraduates

109. EARLY SPANISH PROSE FICTION (3). Prerequisites, Spanish 71, 72.
(1954-1955 and alternate years.) *Fall.* Mr. Adams.

110. THE SPANISH NOVEL, 1605-1898 (3). Prerequisites, Spanish 71, 72.
(1954-1955 and alternate years.) *Spring.* Mr. Adams.

111. MODERN SPANISH NOVELISTS (3). Prerequisites, Spanish 71, 72.
(1955-1956 and alternate years.) *Fall.* Mr. Adams.

112. THE NOVEL IN SPANISH AMERICA (3). Prerequisites, Spanish 71, 72.
(1955-1956 and alternate years.) *Spring.* Mr. Leavitt.

117. CERVANTES (3). Prerequisites, Spanish 71, 72.
Spring. Mr. Stoudemire.

131. LOPE DE VEGA AND HIS CONTEMPORARIES (3). Prerequisites, Spanish 71, 72.
Fall. Mr. Leavitt.

132. CALDERÓN AND HIS CONTEMPORARIES (3). Prerequisites, Spanish 71, 72.
Spring. Mr. Leavitt.

134. SPANISH DRAMA OF THE NINETEENTH CENTURY (3). Prerequisites, Spanish 71, 72.
(1954-1955 and alternate years.) *Fall.* Mr. Leavitt.

135. MODERN SPANISH DRAMA (3). Prerequisites, Spanish 71, 72.
(1955-1956 and alternate years.) *Fall.* Mr. Leavitt.

145. SPANISH PHONETICS (3). Prerequisites, Spanish 71, 72.
Spring. Mr. Duffey.

Courses for Graduates

201. BIBLIOGRAPHY AND METHODOLOGY (3). Required of all candidates for the Ph.D. degree.
Fall. Mr. Stoudemire.

209. NON-FICTIONAL PROSE OF THE SIGLO DE ORO (3).
A study of the critical, historical, scientific, and philosophical writings of the sixteenth and seventeenth centuries.
(1954-1955 and alternate years.) *Spring.* Mr. Stoudemire.

215. EARLY LYRIC POETRY (3). Prerequisites, Spanish 71, 72.
(1955-1956 and alternate years.) *Fall.* Mr. Adams.

216. MODERN LYRIC POETRY (3). Prerequisites, Spanish 71, 72.
(1955-1956 and alternate years.) *Spring.* Mr. Adams.

221-222. OLD SPANISH (6).
Fall and spring. Mr. Keller.

241. STUDIES IN SPANISH-AMERICAN LITERATURE (3).
(1954-1955 and alternate years.) *Spring.* Mr. Leavitt.

291. EARLY SPANISH LITERATURE (3). Prerequisite, Spanish 221-222.
(1954-1955 and alternate years.) *Spring.* Mr. Keller.

393. SPANISH ROMANTICISM (3). Seminar course.
(1955-1956 and alternate years.) *Spring.* Mr. Adams.

395. RESEARCH (3).
Research in a special field under the direction of a member of the department.

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

Professors: E. W. NOLAND, H. D. MEYER, S. H. HOBBS, JR., R. B. VANCE, G. B. JOHNSON, KATHARINE JOCHER, G. W. BLACKWELL, L. M. BROOKS, W. B. SANDERS, *J. P. GILLIN, N. J. DEMERATH, REUBEN HILL, D. O. PRICE
Associate Professors: HARRIET L. HERRING, J. J. HONIGMANN, G. L. SIMPSON, JR., H. L. SMITH, J. L. THIBAUT
Assistant Professors: J. L. COE, †C. L. RILEY
Instructor: H. D. SESSOMS
Part-time Instructors: E. A. T. BARTH, ETHEL M. NASH
Teaching Fellow: T. L. GILLETTE
Graduate Assistant: R. R. TAYLOR

The courses in the Department of Sociology and Anthropology reflect a two-fold objective with the inseparable tasks of seeking to understand man and society and social behavior, and to prepare the student for participation in social research and social guidance. For the undergraduate, sociology may serve as preparation for the mature understanding of his social life as the basis for citizenship as well as for pre-professional training in the social sciences or professions.

Undergraduate major: Sociology 51 and Anthropology 41, usually taken in the sophomore year, are required of all majors and are pre-

* Absent on leave, 1954-1955.
† Visiting Assistant Professor from University of Colorado, 1954-1955.

requisite to other courses in the department except where otherwise indicated. *Majors will plan their courses, with the help of an adviser, according to the following schedule:

Sociology: Sociology 56, five other courses in sociology, seven allied courses, seven non-divisional courses. A student majoring in sociology may take as many as three courses in anthropology as an allied field.

Anthropology: Anthropology 122, five other courses in anthropology, Sociology 56 and six other allied courses, seven non-divisional courses. A student majoring in anthropology may take as many as three sociology courses as an allied field.

Sociology-Anthropology (split major): three sociology courses (including Sociology 56), three anthropology courses (including Anthropology 122), seven allied courses, seven non-divisional courses.

Recreation Leadership: Sociology 56 and five other courses including 173, 174, 176, and 177, as listed for Sociology undergraduate majors in the curriculum for Recreation Leadership.

Through proper selection of courses in the major, allied, and non-divisional fields:

Sociology majors may prepare for positions with the federal, state, and local governments, for some types of personnel work, for social work as case work trainee, for recreation leadership,† and in other applied areas; or for graduate work in sociology, rural sociology, social psychology, social work, personnel, and other specialities.

Anthropology majors may prepare for positions as museum assistants, as research assistants in cultural anthropology and prehistoric archaeology, as government employees, especially in technical assistance programs, and for other lines of endeavor as well as for graduate work in anthropology.

The Sociology-Anthropology split-major prepares a student for public school teaching of social studies if all requirements for a teacher's certificate are completed. A student who wishes to qualify for a position in the public schools should consult the School of Education.

Electives: Students desiring one or more undergraduate elective courses in the department may take Sociology 51, 52, 53, 62, or Anthropology 41. Sociology 51 or its equivalent is prerequisite for all other courses in sociology except where otherwise indicated. Anthropology 41 or its equivalent is prerequisite for all other courses in anthropology except where otherwise indicated.

Graduate Degrees: The A.M. and Ph.D. degrees are offered in sociology and in anthropology. (The rationales and requirements for the A.M. and Ph.D. degrees are explained in the Graduate School Catalogue.) It is the purpose of the graduate program to provide the

* Sociology 52 is not creditable within the six-course major in sociology-anthropology. Transfer majors will usually lack Anthropology 41 which is creditable in the allied field when taken by sociology majors; likewise Sociology 51 is allied for anthropology majors.

† Other departments and schools contributing to specialization in recreation leadership are physical education, dramatic art, art, music, city and regional planning, social work, and education.

best possible professional training for sociologists, anthropologists, and, in conjunction with the Department of Psychology, for social psychologists. Candidates for the A.M. or Ph.D. degree in sociology or anthropology may minor in rural sociology, any of the other social sciences, or in the related fields of statistics, planning, public health, and social work. A minor split between two fields is possible for the Ph.D. degree with special permission of the Graduate School.

The A.M. degree in rural sociology is offered and candidates for this degree may minor in general sociology, anthropology, or any of the other social sciences.

The A.M. degree in sociology with a concentration in recreation leadership is offered. Candidates may minor in general sociology, physical education, dramatic art, art, social work, city and regional planning, education, or in other departments of the social sciences. Minor courses should be selected through consultation with the chairman of the recreation leadership curriculum.

Students in other departments may take a minor for the A.M. or Ph.D. degrees in general sociology, rural sociology, or anthropology if appropriate prerequisite courses have been completed. Minor courses should be selected through consultation with the chairman of the department.

Courses in rural sociology and anthropology *are grouped separately* following the courses in general sociology. Anthropology courses carry the designation "Anthropology" on registration forms and recreation leadership courses carry the designation "Sociology" on registration forms.

GENERAL SOCIOLOGY

Unless otherwise specified, Sociology 51 is prerequisite for sociology courses above 100 and Anthropology 41 is prerequisite for anthropology courses above 100.

Courses for Undergraduates

51. INTRODUCTION TO SOCIOLOGY (3).

The scientific study of principles and comparisons in society and culture as these relate to social groups, organization, processes, institutions, stratification, change, trends, and control.

Fall and spring. Materials fee, $1.00. Messrs. Brooks, Demerath, Noland, Simpson.

52. SOCIAL PROBLEMS (3). No prerequisite. Elective for students not majoring in this department.

Introductory course in social problems with primary emphasis on both the positive and pathological features of society.

Fall and spring. Materials fee, $1.00. Messrs. Sanders, Simpson, Barth, Gillette.

56. HOW TO STUDY SOCIETY (3). Prerequisites, Sociology 51 and Anthropology 41.

An introduction to the methods of studying society with special emphasis on descriptive statistical methods. Required of majors.

Fall and spring. Messrs. Price, Noland.

60 (Formerly 160). THE FIELD OF SOCIAL WORK (3). For sociology majors; others by special permission.

An orientation course based on the description and analysis of the historical development of social work and the operation in contemporary society of the many specialized social work services.

Fall. Messrs. Fink, Hunter.

62. MARRIAGE (3). No prerequisite. Open to General College students, juniors, and seniors.

Analysis of courtship, marriage, and family relationships.

Fall and spring. Mr. Hill.

65. THE PUBLIC SOCIAL SERVICES (3). For sociology majors, others by permission.

An analysis of the social services which are offered under public auspices through city, county, state, and federal agencies.

Spring. Mr. Fink.

75. COMMUNITY ORGANIZATION (Not open to students credited with Sociology 174) (3).

Within the theoretical framework of structure-function, the course analyzes dimensions of community, variation and change, integration and disorganization, techniques and principles of community development.

Spring. Mr. Blackwell.

95, 96. HONORS READING COURSES (3 each). Prerequisite, for Honors Programs, approval of the chairman of the department.

Special reading for honors in a selected field under the direction of a member of the department. A student may take only two courses in the Honors Program.

Fall and spring. Members of the department.

Courses for Graduates and Advanced Undergraduates

107. FOUNDATIONS OF THE SOCIAL SCIENCES (Philosophy 107) (3). Prerequisites, two courses in philosophy, psychology, or sociology.

(This was Philosophy 142 prior to 1954. See Philosophy 107 for description.)

Spring. Mr. Kattsoff.

122. CULTURAL ANTHROPOLOGY (Anthropology 122) (Folklore 122) (3). (See Anthropology 122 for description.)

Fall. Materials fee, $1.00. Mr. Johnson.

125. THE NEGRO (3).

A study of the Negro community and its institutions, status of the Negro in American society, problems of race relations, and the process of integration.

Spring. Mr. Johnson.

128. FOLK CULTURES IN THE MODERN WORLD (Anthropology 128) (Folklore 128) (3).

(See Anthropology 128 for description.)

(1955-1956 and alternate years.) *Fall. Materials fee, $1.00.* Mr. Gillin.

133. INTRODUCTION TO SOCIAL PSYCHOLOGY (Psychology 133) (3). Prerequisites, Psychology 24 and 25.

Social groupings; dynamics of person-to-person relations.

Fall and spring. Messrs. McCurdy, Thibaut.

152. HISTORY OF SOCIAL THOUGHT (3). Prerequisite, introductory course in one of the social sciences or philosophy.

Emphasis on historic social ideas of Western culture considered against a background of general cultural analysis in terms of systematic theory.

Spring. Messrs. Vance, Demerath.

153. SOCIAL STRUCTURE (3).

Analysis of social structure and stratification in terms of class, status, prestige, rank, and function. Attention is given to the social role of the elite, bureaucracies, and professional and middle classes.

(1955-1956 and alternate years.) *Fall.* Mr. Vance.

154. CONTEMPORARY SOCIETY (3). Prerequisites, three courses in sociology.

The study of the cultural evolution of society from the view point of the folk regional development: folkways, stateways, geographic factors, regions, states, modern technology and change, the application to contemporary American society.

(Not offered in 1954-1955.) *Spring.* Mr. Simpson.

161. SOCIOLOGY OF THE FAMILY (3).

Analysis of contemporary family institutions as they vary in historical time and social space as a background for interpreting American family life.

(1955-1956 and alternate years.) *Fall.* Mr. Hill.

162. DYNAMICS OF FAMILY DEVELOPMENT (3). Prerequisites, Sociology 51 and general psychology.

Analysis of the natural history of families, how they form, function, and grow to maturity. Focus on the developmental growth of children and parents in interaction in seven stages of the family life cycle.

(1954-1955 and alternate years.) *Fall.* Mr. Hill.

168. THE CITY (3).

The city as a social phenomenon in various cultures. Analysis of urban trends, characteristics, and functions of cities with reference to ecology and social organization. Sociological elements in housing, urban planning, and guided development.

Spring. Materials fee, $1.00. Mr. Demerath.

169. THE INDUSTRIAL COMMUNITY (3).

Development of the industrial community since the Industrial Revolution; effect of changing conditions and differences in surrounding society; paternalism, labor laws, economic and labor problems as they affect the industrial community.

Spring. Miss Herring.

170. INDUSTRIAL SOCIOLOGY (3).

A study of human relations in industry from the standpoint of the sociological and socio-psychological factors involved. The basic human relations problems in an industrial situation and the methods of approaching them.

Fall. Mr. Noland.

173. COMMUNITY RECREATION (3).

Foundations of organized recreation; backgrounds and theories; objectives and principles; social and economic factors; public, private, and commercial interests; recreation and the social institutions.

Fall. Mr. Meyer.

176. PROGRAM PLANNING FOR COMMUNITY RECREATION (3).
The fields of activity; types, correlations, and program activities; principles and methods of program planning; schedules according to time basis, special activities and feature events.
Spring. Mr. Meyer.

177. ADMINISTRATION OF RECREATION (3). Formerly Sociology 276.
Analysis of recreation from the standpoint of organization; administration; finances; budget; reports and records; leadership and training; legislation; publicity and public relations; coordination of community resources; program operation.
Spring. Mr. Meyer.

180. STATE AND REGIONAL PROBLEMS AND PLANNING (3).
A survey of the field of state and regional problems and planning with special reference to the basic theory of regionalism. A brief survey of recent developments of United States and world regions.
(1954-1955 and alternate years.) *Fall.* Mr. Simpson.

181. REGIONAL SOCIOLOGY OF THE SOUTH (3). No prerequisite.
A sociological analysis of the southern region of the United States. Emphasis on facts, factors, and policies pertaining to geography, population, and culture; resources and waste; social institutions and planning.
Spring. Materials fee, $1.00. Messrs. Blackwell, Simpson.

183. SOCIAL CONTROL AND PUBLIC OPINION (3).
The bases of social control; psychological, cultural, and institutional factors conditioning the management of public opinion. Special emphasis on techniques of social persuasion and control.
(1955-1956 and alternate years.) *Fall.* Mr. Brooks.

186. POPULATION (3).
A study of problems of quality and quantity of population including theories of population increase and problems of composition, distribution, differential fertility, population pressure, and internal migration.
Fall. Materials fee, $1.00. Mr. Vance.

190. DIAGNOSIS OF JUVENILE DELINQUENCY (3). Not open to students credited with Sociology 198 prior to fall quarter, 1950.
After a brief historical background this course traces the development of case study and diagnosis of juvenile delinquency through various approaches.
Fall. Materials fee, $1.00. Mr. Sanders.

191. SOCIAL STATISTICS (3). Prerequisites, three courses in sociology. Carries no credit for A.M. minor in sociology.
Elementary descriptive statistics and basic principles of statistical inference including estimation and tests of hypotheses. Required of all candidates for graduate degrees in sociology.
Three lecture hours a week plus laboratory, spring. Laboratory fee, $2.00. Mr. Price.

192. CRIMINOLOGY (3).
The principles of criminology and penology with emphasis on psycho-sociological factors; study of historical and contemporary theory and practice.
Fall and spring. Messrs. Brooks, Sanders.

193. SOCIAL PATHOLOGY (3). Not open to students credited with Sociology 52.
Poverty, relief, delinquency, vagrancy, prostitution, alcoholism, crime, mental defects, and other pathological conditions. Analysis of therapeutic measures. Field trips to county and state institutions.
Spring. Mr. Sanders.

196. TECHNIQUES OF QUANTITATIVE FIELD SURVEYS (3). Prerequisites, three courses in sociology.

This course includes planning a field survey, construction of questionnaire and schedule, instructions for enumerators, interviewing, supervision of enumeration, and editing schedules.

(Not offered in 1954-1955.) *Spring.* Mr. Price.

197. POPULATION STATISTICS (3).

Training and techniques for quantitative research with population data; composition characteristics, making of population estimates, computation and standardization of birth and death rates, construction and application of life tables, measurement of migration.

(1954-1955 and alternate years.) *Fall. Laboratory fee, $2.00.* Mr. Price.

198. TREATMENT OF JUVENILE DELINQUENCY (3).

Emphasis on the juvenile court and various means of prevention and treatment of juvenile delinquency. Field trips.

Spring. Materials fee, $1.00. Mr. Sanders.

199. MODERN PENOLOGY (3). Prerequisite, Sociology 192 or equivalent.

Specialized study of trends, legislation, experiments, and accomplishments in correctional programs. Such topics as parole, classification, and personnel will be emphasized.

(1954-1955 and alternate years.) *Spring.* Mr. Brooks.

Courses for Graduates

208. METHODS IN SOCIAL RESEARCH (3).

An analysis of social research to acquaint the student with the general field, the role of theory in scientific research, and the field of applied social research. Emphasis is placed upon the application of scientific method to social data. Readings and discussions are supplemented with data from recent and current field studies. Required of first-year graduate students in sociology.

Fall. Materials fee, $1.00. Messrs. Blackwell, Hill, Miss Jocher.

210. FOLK SOCIOLOGY (Folklore 210) (3).

Folk sociology as a subject field for the historical study of total human society and the empirical study of group behavior.

Fall. Mr. Simpson.

212. AMERICAN SOCIOLOGISTS (3).

A general treatise on the rise and development of American sociology and a survey of the work and personalities of American sociologists projected on the background of social theory and research.

Spring. Mr. Simpson.

218. HUMAN ECOLOGY (SEMINAR) (3).

Consideration of theory and research emerging around the concept of human ecology. A review of the background of human ecology is followed by readings, reports, and research on its contemporary development.

(1954-1955 and alterate years.) *Spring. Materials fee, $1.00.* Mr. Vance.

220. THEORIES OF CULTURE (Anthropology 220) (3).

(See Anthropology 220 for description.)

(1955-1956 and alternate years.) *Fall. Materials fee, $1.00.* Mr. Gillin.

221. FIELD METHODS IN CULTURAL ANTHROPOLOGY (Anthropology 221) (3).

(See Anthropology 221 for description.)

Spring. Mr. Honigmann.

229. CULTURE AND PERSONALITY (Anthropology 229) (3).
(See Anthropology 229 for description.)
(1954-1955 and alternate years.) *Fall. Materials fee, $1.00.* Mr. Gillin.

230. RACE AND CULTURE CONTACTS. (Anthropology 230) (Folklore 230) (3).
(See Anthropology 230 for description.)
Spring. Mr. Johnson.

233. METHODS OF SOCIAL PSYCHOLOGY (Psychology 233) (3).
(See Psychology 233 for description.)
Spring. Mr. Thibaut.

235. MEASUREMENT OF ATTITUDES (Psychology 235) (3).
(See Psychology 235 for description.)
(Not offered in 1954-1955.) *Fall.*

240. SOCIAL RESEARCH IN INDUSTRIAL RELATIONS (3). Prerequisite, Sociology 170 or Economics 191.
A critical appraisal of recent and current research in human relations in industry with emphasis upon methodology and research opportunities. Systematic analysis of theories and procedures of sociology, anthropology, and social psychology bearing upon research in labor and industrial relations.
Spring. Mr. Noland.

253. ADVANCED SOCIAL STATISTICS (3). Prerequisite, Sociology 191.
Multiple and partial correlation, analysis of variance and covariance, sampling, and other topics applicable to specific research projects of the student.
Fall. Laboratory fee, $2.00. Mr. Price.

262. EUROPEAN SOCIOLOGICAL THEORY (3).
Social organization, change, and social action as interpreted by Pareto, Marx, Durkheim, Weber, Mannheim, and other European theorists, together with consideration of their influence currently in the United States. Required of all candidates for the Ph.D. degree in sociology.
Fall. Mr. Demerath.

265. THE SOCIOLOGY OF HEALTH AND THE HEALTH PROFESSIONS (3).
Reviews the work done in the area of convergent interests of the medical and social sciences with emphasis on further research.
Spring. Mr. Harvey Smith.

270. SOCIOLOGY OF RELIGION (Religion 270) (3).
(See Religion 270 for description.)
(Not offered in 1955-1956.) *Spring.* Mr. Nash.

274. ADVANCED COMMUNITY SOCIOLOGY (Not open to students credited with Sociology 174) (3).
Analysis of theory and empirical research in the sociology of community; the framework of the course is set by lecture with emphasis on reports of research by the students.
Fall. Mr. Blackwell.

301, 302. READING AND RESEARCH (3 each semester). Registration by permission of the instructor.
Advanced reading, library research or field research on a selected topic under guidance of the instructor.
Fall and spring. Members of the department.

315, 316. READING AND RESEARCH IN METHODOLOGY (3 each semester). Registration by permission of the instructor.
Special work on selected problems of research methodology.
Fall and spring. Members of the department.

321, 322. FIELD RESEARCH (3 each semester).
Fall and spring. Staff.

327, 328. SEMINAR IN SELECTED TOPICS (3 each semester).
Fall and spring. Staff.

331. NATIONAL AND LOCAL POLICIES FOR FAMILY LIFE (3).
Graduate research seminar.
(1954-1955 and alternate years.) *Spring.* Mr. Hill.

333. EDUCATION FOR MARRIAGE AND FAMILY LIFE (3).
A seminar on materials and methods employed in family life education. Students must audit Sociology 62 for observation of content and techniques of a course in preparation for marriage and family life.
(1954-1955 and alternate years.) *Fall.* Mr. Hill.

334. CRITIQUE OF RESEARCH IN MARRIAGE AND THE FAMILY (3).
This seminar reviews the basic conceptual frameworks used in family research in the past; identifies changing emphasis in family study; and evaluates current studies in the major fields of family research.
(1955-1956 and alternate years.) *Spring.* Mr. Hill.

341. MASTER'S THESIS (3).
Individual research in a selected field under the direction of a member of the department.
Fall and spring.

342. DOCTORAL DISSERTATION (3).
Individual research in a selected field under the direction of a member of the department.
Fall and spring.

*RURAL SOCIOLOGY

Course for Undergraduates

53. RURAL SOCIAL ECONOMICS (3). No prerequisite.
A general introductory course in the principles and problems of rural social economics, with attention to the relationship between economic and social conditions, especially in the South.
Fall. Mr. Hobbs.

Courses for Graduates and Advanced Undergraduates

101. NORTH CAROLINA: ECONOMIC AND SOCIAL (3). No prerequisite.
This course is designed to familiarize the student with North Carolina: population, agriculture, resources, social life, economic development, industry, wealth, taxation, education, public welfare.
Fall and spring. Mr. Hobbs.

* Courses in rural sociology carry regular designation "Sociology" on registration forms. Sociology 174, 181, and 218 may be counted as rural sociology courses in a graduate program. Additional graduate courses in rural sociology are available at North Carolina State College in Raleigh.

102. RURAL SOCIOLOGY (3). No prerequisite.

Topics include rural society and rural sociology, socio-economic aspects of agriculture, conditions and movements of rural population, rural social institutions and agencies, bio-social conditions, socio-cultural conditions, rural-urban relations.

Fall. Mr. Hobbs.

103. HISTORY OF AGRICULTURAL AND RURAL INSTITUTIONS (3). This course traces the development of agriculture from its earliest beginnings to the present: early development; Greece and Rome; later agriculture in Europe; American agricultural institutions.

(1954-1955 and alternate years.) *Spring.* Mr. Hobbs.

110. RURAL LAND PLANNING AND LAND ECONOMICS (3). Prerequisite or corequisite, general economics or Sociology 53.

A course covering the broad field of land economics, with special attention to utilization and conservation of farm and forest land resources in the United States.

(1955-1956 and alternate years.) *Spring.* Mr. Hobbs.

166. THE RURAL COMMUNITY (3).

The rural community as a sociological group, evolution of the rural community, village-community economy, social institutions, social organization, social control, sociological significance, the future of the rural community.

Spring. Mr. Hobbs.

Courses for Graduates

311, 312. READING AND RESEARCH IN RURAL SOCIOLOGY (3 each semester). Prerequisites, approved courses in general sociology and rural sociology and permission of the instructor.

Research, seminars, and field investigations in selected topics from the following: rural social problems; rural social surveys, research technique and field work; rural social statistics, interpretation and use; rural social engineering.

Fall and spring. Mr. Hobbs.

*ANTHROPOLOGY

Courses for Undergraduates

41. GENERAL ANTHROPOLOGY (3).

A basic introduction to man as a species and as a producer of customs and culture. The evolution of mankind, physical anthropology, modern varieties and races, and human capabilities. The fundamental cultural developments of human history with a general study of the functioning principles of culture. Study of selected culture areas.

Fall and spring. Materials fee, $1.00. Messrs. Johnson, Honigmann, Coe, Riley, Taylor.

74. ARCHAEOLOGY OF NORTH AMERICA (3).

A study of the growth of American Indian cultures north of the Rio Grande as interpreted by archaeological research. Special emphasis on the prehistory of North Carolina and the eastern woodlands.

Fall. Laboratory fee, $1.00. Mr. Coe.

79. RESEARCH METHODS IN ARCHAEOLOGY (3).

A study of the basic principles underlying archaeological study of prehistoric sites. Field trips and laboratory work.

Spring. Laboratory fee, $3.00. Mr. Coe.

* As indicated, certain courses in anthropology also carry credit in general sociology.

95, 96. HONORS READING COURSES (3 each semester). Prerequisite, for Honors Program, approval of the chairman of the department.

Special reading for honors in a selected field under the direction of a member of the department. A student may take only two courses in the Honors Program.

Fall and spring. Members of the department.

Courses for Graduates and Advanced Undergraduates

122. CULTURAL ANTHROPOLOGY (Sociology 122) (Folklore 122) (3).

A systematic survey of the customs and modes of life of mankind based on scientific explanation of the ways of culture. Required for Anthropology majors.

Fall. Materials fee, $1.00. Messrs. Gillin, Johnson.

123. PRIMITIVE RELIGIONS (3).

A systematic survey of the common elements of ritual in human society approached from the viewpoint of cultural anthropology.

(1954-1955 and alternate years.) *Spring.* Mr. Honigmann.

124. FOLK AND PRIMITIVE TECHNOLOGIES (3).

An intensive study of the technological culture of a selected series of native peoples in so-called underdeveloped areas. Not only for students of anthropology, but also for planners and field technicians who will be engaged in programs of assistance to underdeveloped areas.

(1955-1956 and alternate years.) *Fall.* Mr. Honigmann.

126. RACES AND PEOPLES OF AFRICA (3).

Survey of the native peoples and cultures of Africa south of the Sahara.

Fall. Materials fee, $1.00. Mr. Johnson.

127. NATIVE PEOPLES AND CULTURES OF MEXICO AND CENTRAL AMERICA (Folklore 127) (3).

Modern Mexico and Central America seen against the background of archaeology, physical anthropology, and aboriginal culture, including both the "high cultures" of the Aztec and Mayas and the tribal cultures of various regions; present-day mixtures and syntheses in physical types, customs, and institutions.

(1954-1955 and alternate years.) *Fall. Materials fee, $1.00.* Mr. Gillin.

128. FOLK CULTURES IN THE MODERN WORLD (Sociology 128) (Folklore 128) (3).

The folk culture is viewed as a way of life which stands midway between that of the "primitive" tribal native and that of the urbanized city-dweller.

(1955-1956 and alternate years.) *Fall. Materials fee, $1.00.* Mr. Gillin.

129. PEOPLES OF OCEANIA (3). Prerequisite, Anthropology 41.

A survey of racial types and the development of culture in the island world of the Pacific.

Fall. Mr. Riley.

130. INDIANS OF NORTH AMERICA (3).

A descriptive study of the cultural areas of North America at the time of European contact, with emphasis on the Southeast.

Spring. Laboratory fee, $1.00. Messrs. Johnson, Coe.

131. CULTURES OF SOUTHEAST ASIA (3).

The cultures and social structures of southeast Asia including recent nationalistic movements.

Fall. Mr. Honigmann.

132. NATIVE PEOPLES AND CULTURES OF SOUTH AMERICA (Folklore 132) (3). Not open to students credited with Anthropology 127 prior to fall quarter, 1950.

An approach to the understanding of South America in ethnological terms; aboriginal physical types, archaeology, and cultures are surveyed. The development of modern Latin American civilization is analyzed against this background.

(1955-1956 and alternate years.) *Spring. Materials fee, $1.00.* Mr. Gillin.

185. INTRODUCTION TO FOLKLORE (Folklore 185) (Comparative Literature 185) (3).

(See Folklore 185 for description.)

Fall. Mr. Hudson.

Courses for Graduates

220. THEORIES OF CULTURE (Sociology 220) (3).

A systematic survey of the history of theory in cultural anthropology leading to the development of a system of operational principles which the student may apply in his own fieldwork and further studies involving cultural problems.

(1955-1956 and alternate years.) *Fall. Materials fee, $1.00.* Mr. Gillin.

221. FIELD METHODS IN CULTURAL ANTHROPOLOGY (Sociology 221) (3).

Practical exercises and discussion cover topics of role taking, observation, interviewing, note taking, and pattern generalization.

(1954-1955 and alternate years.) *Spring.* Mr. Honigmann.

229. CULTURE AND PERSONALITY (Sociology 229) (3).

A scientific analysis of the influence of cultural forms on the individual in our own and other societies, considered from the anthropological, psychological, and clinical points of view.

(1954-1955 and alternate years.) *Fall. Materials fee, $1.00.* Mr. Gillin.

230. RACE AND CULTURE CONTACTS (Sociology 230) (Folklore 230) (3).

An analysis of acculturation situations arising from contacts of peoples of different racial or cultural heritages in America, Africa, Polynesia, Melanesia, and other areas.

Spring. Mr. Johnson.

301, 302. READING AND RESEARCH (3 each semester).

Fall and spring. Staff.

315, 316. READING AND RESEARCH IN METHODOLOGY (3 each semester).

Fall and spring. Staff.

321, 322. FIELD RESEARCH (3 each semester).

Fall and spring. Staff.

327, 328. SEMINAR IN SELECTED TOPICS (3 each semester).

Fall and spring. Staff.

341. MASTER'S THESIS (3).

Individual research in a selected field under the direction of a member of the department.

Fall and spring.

342. DOCTORAL DISSERTATION (3).

Individual research in a selected field under the direction of a member of the department.

Fall and spring.

*RECREATION LEADERSHIP

Courses for Undergraduates

For descriptions of courses, see sections on General Sociology, Rural Sociology, and Anthropology.

Required courses (in addition to Sociology 51 and Anthropology 41):

Sociology 56 How to Study Society
Sociology 75 Community Organization
Sociology 173 Community Recreation
Sociology 176 Program Planning for Community Recreation
Sociology 177 Administration of Recreation

One of the following three courses is required according to the student's special field of interest:

Sociology 168 The City
Sociology 169 The Industrial Community
Sociology 166 The Rural Community

After fulfillment of divisional and non-divisional requirements, for majors who find it possible to take extra work in sociology, the following are suggested: Sociology 101, 128, 133, 153 or 186, 154 or 183, 161, 170, 180 or 181, 190 or 193, 191.

Courses for Graduates

Sociology 208, Methods of Social Research, given in the fall semester of each year, is required for graduate majors.

Transfer students who have not had an undergraduate major in sociology will take any courses needed to complete the minimum required for admission to the Graduate School. Sociology 51 and 56 are required of all students.

DEPARTMENT OF STATISTICS

Professors: HAROLD HOTELLING, RAJ CHANDRA BOSE, SAMARENDRA NATH ROY
Associate Professors: GEORGE EDWARD NICHOLSON, JR., *Chairman*, WASSILY HOEFFDING
Assistant Professor: WALTER LAWS SMITH

Courses for Graduates and Advanced Undergraduates

100. PRINCIPLES OF STATISTICAL INFERENCE (3). Prerequisite, college algebra.

Introduction to fundamental concepts of statistical inference. The role of statistical thinking in the scientific method. Uses and limitations of inverse probability. Modern notions of statistical tests as rules of inductive behavior.

Fall. Mr. Nicholson.

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* Courses in Recreation Leadership carry regular designation "Sociology" on registration forms.

101. STATISTICAL ANALYSIS I (4). Corequisite, integral calculus.

Fundamentals of the analysis and interpretation of statistical data. This course, although beginning with the most elementary considerations, is intermediate in character and is designed for majors and minors in statistics.

Three lecture and two laboratory hours a week, fall. Staff.

102. STATISTICAL ANALYSIS II (4). Prerequisite, Statistics 101.

A continuation of Statistics 101. These two courses contain the minimum amount of statistical methodology required of all majors and minors. It is desirable to take Statistics 134-135 concurrently with this sequence.

Three lecture and two laboratory hours a week, spring. Staff.

131. PROBABILITY (3). Prerequisite, advanced calculus.

A first course in modern probability theory. Random variables and sample spaces. Probability as a set function. Additive and multiplicative laws. Conditional probability. Continuous and discontinuous distributions. Laws of large numbers and the central limit theorem.

Fall. Staff.

134. STATISTICAL THEORY I (5). Prerequisite, advanced calculus.

Fundamentals of the modern theory of statistics. This course begins with elementary considerations but is intermediate in character and is designed for majors and minors in statistics.

Four lecture and two laboratory hours a week, fall. Staff.

135. STATISTICAL THEORY II (5). Prerequisite, Statistics 134.

A continuation of Statistics 134. These two courses contain the basic statistical theory necessary for all advanced work in the department. It is desirable to take Statistics 101-102 concurrently with this sequence. Required of all majors and minors.

Four lecture and two laboratory hours a week, spring. Staff.

182. MATHEMATICAL ECONOMICS (Economics 182) (3). Prerequisite, Mathematics 171 (Advanced Calculus); corequisite, Mathematics 147 (Matrices).

Perfect and imperfect competition. Monopoly. Utility vs. ranking of preferences. Relations between commodities. General equilibrium. Effects of taxes and controls of various kinds. Index numbers.

(1954-1955 and alternate years.) *Fall.* Mr. Hotelling.

183. ADVANCED MATHEMATICAL ECONOMICS (Economics 183) (3). Prerequisites, Statistics 182 and Mathematics 141 (Differential Equations).

Dynamic variations in the economy. Calculus of variations and stochastic process theory with applications to economic problems. Valuation, depreciation, and depletion. Most profitable rates of exploitation of mineral and biological resources.

(1954-1955 and alternate years.) *Spring.* Mr. Hotelling.

197. POPULATION STATISTICS (Sociology 197) (3). Prerequisite, permission of instructor.

Training in techniques for quantitative research with population data, composition characteristics, making of population estimates, computation and standardization of birth and death rates, construction and application of life tables, measurement of migration.

Two lecture and two laboratory hours a week, spring. Laboratory fee, $2.00. Messrs. Price, Nicholson.

Courses for Graduates

200. APPLIED MULTIVARIATE ANALYSIS I (3). Prerequisite, Statistics 135.
Relations between multiple regression, analysis of variance, multivariate analysis and factor analysis. Tests with discriminant functions. The generalized Student ratio. Use of roots of determinental equations.
Fall. Mr. Nicholson.

201. APPLIED MULTIVARIATE ANALYSIS II (3). Prerequisite, Statistics 200.
Continuation of Statistics 200. Statistical inference applied to classification problems. Resolution of a mixed series into two normal components. The problem of three or more groups. Problems of optimum selection. The concept of distance and the problem of group constellations.
Spring. Mr. Nicholson.

202. METHODS OF OPERATIONS RESEARCH (3). Prerequisite, Statistics 135.
Optimum distribution of effort, theory of games, linear programming, queue theory, applied probability, recent developments, application of results to specific problems.
Fall. Mr. Nicholson.

203. SELECTED TECHNIQUES OF APPROXIMATION (3). Prerequisite, advanced calculus.
The method of steepest descent and other methods of approximating integrals with special attention to integrals occurring in probability and statistics. Asymptotic series. Large-sample approximations. Orthogonal polynomials and their applications to numerical quadrature, interpolation and moment problems.
(1955-1956 and alternate years.) *Fall.* Mr. Hotelling.

207. SAMPLE SURVEY METHODS (3). Prerequisite, Statistics 102.
Descriptive and analytic surveys. Practical problems arising in the planning, execution and analysis surveys. Errors arising in surveys. Description of frame and choice of sampling units. Methods of collecting information. Application of sampling systems including designs, methods of selection, probabilities for selection and methods of estimation.
Spring. Messrs. Finkner, Horvitz.

208. SAMPLE SURVEY THEORY (3). Prerequisite, Statistics 134.
Different types of sampling techniques and methods of estimation with reference to finite or infinite populations. Non-response. Optimum allocation of resources. Different types of surveys with illustrations.
Fall. Messrs. Bose, Roy.

210. ADVANCED STATISTICAL ANALYSIS I (3). Prerequisite, Statistics 135.
Methods of analyzing data based on linear and non-linear regression models. Variance components. Errors in both variables. Relations between models.
Fall. Messrs. Anderson, Hader, Lucas.

211. ADVANCED STATISTICAL ANALYSIS II (3). Prerequisite, Statistics 210.
Advanced topics in the analysis of design and experiments. Transformations. Enumeration data. Discriminant functions. Heterogeneous error and non-parametric analysis.
Spring. Messrs. Anderson, Hader, Lucas.

212. ECONOMETRIC METHODS (5). Prerequisites, Statistics 134 and one year of economic theory.

Stochastic elements in economic theory. Problems of model construction. Extensions of economic data. Use of experimental designs and surveys. Elements of multivariate analysis. Techniques for analyzing simultaneous economic relations. Problems in the analysis of time series data. Exploration of response surfaces. Elements of activity analysis.

(Given alternate years beginning 1954-1955.) *Spring.* Messrs. Anderson, Hildreth.

220. THEORY OF ESTIMATION (3). Prerequisite, Statistics 135 and 231.

Risk function. Admissible, Bayes and minimax estimators. Sufficient statistics. Unbiased estimators with minimum variance. Consistent estimators. Maximum likelihood estimators. Confidence sets. Sequential estimation. Statistical prediction.

Fall. Messrs. Hoeffding, Smith.

221. TESTS OF HYPOTHESES. TWO-DECISION RULES (3). Prerequisite, Statistics 220.

Tests as rules for deciding between two alternatives. Tests which are optimum in various respects. Sequential tests. k-decision problems.

Spring. Mr. Hoeffding.

222. NONPARAMETRIC INFERENCE (3). Prerequisite, Statistics 135 and 231.

Estimation and testing when the functional form of the population distribution is unknown. Rank and sign tests. Tests based on permutations of observations. Nonparametric confidence intervals and tolerance limits.

Spring. Mr. Hoeffding.

231. ADVANCED PROBABILITY (3). Prerequisite, Statistics 131 or 134.

Selected topics in measure and integration theory, with special reference to random variables. Properties of characteristic functions. Weak and strong laws of large numbers. Central limit theorems.

Fall. Messrs. Hoeffding, Smith.

232. GENERAL THEORY OF STATISTICAL DECISION (3). Prerequisite, Statistics 231.

Selected topics in the general theory of statistical decisions based on the work of Abraham Wald.

Spring. Mr. Hoeffding.

233. LEAST SQUARES AND TIME SERIES (3). Prerequisites, Statistics 134 and Mathematics 147 (Matrices).

The classical method of least squares and modern improvements and developments. Interpretation of the results in terms of probability. Applications to social and to natural sciences. The problem of observations ordered in time. Correlation and regression of time series. Seasonal variation and secular trends. Methods of correcting for lack of independence and of avoiding fallacies.

Fall. Mr. Hotelling.

235. STOCHASTIC PROCESSES AND THEIR APPLICATION (3). Prerequisite, Statistics 135.

Cumulated random motions and other examples of stochastic processes from the physical, biological, and social sciences. Elements of the general theory. Discrete and continuous processes; stationary and evolutionary processes.

(1955-1956 and alternate years.) *Spring.* Messrs. Hotelling, Smith.

237. TIME SERIES ANALYSIS (3). Prerequisite, Statistics 233.

Analysis of data involving trends, seasonal variations, cycles and serial correlations. Periodograms and correlograms. Exogenous and endogenous cycles. Stochastic difference equations. Tests for randomness. Distributions of serial correlation coefficients. The sinusoidal limit theorem.

(1955-1956 and alternate years.) *Spring.* Mr. Hotelling.

250. ADVANCED ANALYSIS OF VARIANCE AND COVARIANCE, WITH APPLICATIONS TO EXPERIMENTAL DESIGNS. Prerequisite, Statistics 135.

Unified mathematical theory for the analysis of data from experimental designs, including split plot and factorial designs. Analysis of covariance. Multiple classified data. Components of variance.

Fall. Mr. Bose.

251. COMBINATORIAL PROBLEMS OF THE DESIGN OF EXPERIMENTS. Prerequisite, Statistics 250.

Construction of orthogonal Latin squares, balanced and partially balanced designs, confounded and fractionally replicated factorial designs and orthogonal arrays. Non-existence proofs.

Spring. Mr. Bose.

260. MULTIVARIATE ANALYSIS (3). Prerequisites, Statistics 135 and Mathematics 147 (Matrices).

Tests and confidence intervals in multivariate analysis of variance. Association between subsets of a multivariate normal set. The rank of a matrix. Factor analysis.

Fall. Mr. Roy.

261. ADVANCED MULTIVARIATE ANALYSIS (3). Prerequisite, Statistics 260.

Distribution problems connected with the tests and confidence intervals discussed in Statistics 260 (Multivariate Analysis). The power functions of the tests and the shortness of the confidence intervals against different classes of alternatives. Some applications, especially to problems in sociology, psychology and anthropology.

Spring. Mr. Roy.

300-301. SEMINAR IN STATISTICAL ANALYSIS (3 each). Prerequisite, a course requiring Statistics 135 as prerequisite.

Fall and spring. Staff.

310-311. SEMINAR IN THEORETICAL STATISTICS (3 each). Prerequisite, a course requiring Statistics 135 as prerequisite.

Fall and spring. Staff.

321-322. SPECIAL PROBLEMS (3 each).

Fall and spring. Staff.

331-332. ADVANCED RESEARCH (3 each).

Fall and spring. Staff.

DEPARTMENT OF ZOOLOGY

Professors: D. P. COSTELLO, *R. E. COKER, C. D. BEERS, W. L. ENGELS, MAURICE WHITTINGHILL

Associate Professors: C. S. JONES, H. E. LEHMAN, D. G. HUMM, C. E. JENNER, M. R. CARRIKER

Research Associate: CATHERINE HENLEY

Teaching Fellow: OSCAR H. PARIS, JR.

Graduate Assistants: C. K. LEVY, L. E. SCHACHT, BONNY L. MORGAN, J. H. KEPCHAR, B. L. MCCLANAHAN, J. D. MOORE

* Kenan Professor Emeritus.

For the A.B. degree with major in zoology there are required not less than twenty courses, distributed as follows. (1) Six to eight courses in zoology of the level of 41 or higher, these courses to include Zoology 41, 42, 103, 104, and at least two other laboratory courses. (2) Six to eight courses in allied departments of the Division of Natural Sciences, to include Botany 41, at least two courses in chemistry, and at least two in physics. Chemistry courses numbered below 21 and mathematics courses below 31 may not be counted as satisfying this requirement. (3) Six to eight courses in departments outside the Division of Natural Sciences.

Students who plan to major in zoology should take Zoology 41 and 42 during their sophomore year.

Those students who plan to teach in public high schools should read the general statement under the School of Education, page 136.

With the recommendation of the department and the approval of the Administrative Board of the Graduate School, special courses and direction of graduate studies may be offered by members of the staff of the Institute of Fisheries Research, which see.

Courses for Undergraduates

1. ELEMENTS OF HUMAN AND ANIMAL BIOLOGY (4). Freshman elective.

Zoology 1 and Botany 1 are offered primarily for students who do not plan to major in the biological sciences. For introductory work toward a major or for pre-professional training refer to Zoology 41, 42 and Botany 41, 42.

Basic similarities of all living organisms; organ systems and their physiology; embryology, genetics, organic evolution, ecology, survey of the major phyla.

Three lecture and two laboratory hours a week, fall and spring. Laboratory fee, $3.00. Messrs. Lehman, Humm; assistants.

41. INTRODUCTORY VERTEBRATE ZOOLOGY (4).

Zoology 41 and 42 are planned to serve general cultural needs and to meet in part the usual pre-professional requirements.

Fundamentals of vertebrate anatomy, physiology, histology, embryology, classification, and homology.

Three lecture and four laboratory hours a week, fall and spring. Laboratory fee, $7.50. Mr. Jones; assistants.

42. INTRODUCTORY INVERTEBRATE ZOOLOGY AND PRINCIPLES (4). Prerequisite, Zoology 41, or special permission of the instructor.

Structure, function, relationships, and significance of invertebrate animals; and the general zoological principles of mitosis, meiosis, genetics, classification, and organic evolution.

Three lecture and four laboratory hours a week, fall and spring. Laboratory fee $7.50. Messrs. Jenner, Carriker; assistants.

46. OCEANOGRAPHY (OCEANIC ECOLOGY) (3). Specific prerequisites are not set up, but enrollment is limited by consent of the instructor and the Dean of the College of Arts and Sciences.

The study of the seas: history of oceanography; the chemical, physical, topographic, and geographic features, and the circulation, as such conditions affect biological productivity and fisheries.

(Not offered in 1954-1955.) *Two lecture and two demonstration hours a week.*

72. HUMAN GENETICS (3). Prerequisites, Zoology 1, or Zoology 41 and 42.

An elementary study of biological inheritance in man. Effects of mutation, selection, migration, and racial mixture; applications of genetics to medico-legal questions.

Three lecture hours a week, spring. Mr. Whittinghill.

78. ANIMAL EVOLUTION (3). Prerequisites, Zoology 1, or Zoology 41 and 42.

Organic evolution as the unifying biological concept: historical development; nature of evidence; Darwinian and neo-Darwinian concepts; theories of mechanism; some impacts in other fields.

Three lecture and demonstration hours a week, spring. Mr. Jones.

NOTE: Courses in Directed Teaching in High School Science and in Materials and Methods of Teaching High School Science will be found under the School of Education.

Courses for Graduates and Advanced Undergraduates

101. ANIMAL BIOLOGY FOR THE SECONDARY SCHOOL TEACHER (4).

Consideration of the major fields and concepts of zoology, *e.g.*, anatomy, physiology, taxonomy, embryology, cytology, genetics, parasitology, ecology, economic zoology, and evolution.

Six lecture and six laboratory-demonstration hours a week, first term, summer. Laboratory fee, $5.00. Mr. Jones.

103. COMPARATIVE VERTEBRATE ANATOMY (4). Prerequisites, Zoology 41 and 42.

Lectures on the structure and evolutionary history of the chief organ systems of vertebrates. Dissections of amphioxus, petromyzon, dogfish head, necturus, and cat.

Two lecture and six laboratory hours a week, fall. Laboratory fee, $12.50. Mr. Engels.

104. VERTEBRATE EMBRYOLOGY (4). Prerequisites, Zoology 103, or Zoology 41, 42 and special permission of the instructor.

Development in representative vertebrates, including man; special study of cleavage, germ-layer formation, organogenesis, and extra-embryonic membranes, using frog, chick, and pig.

Two lecture and six laboratory hours a week, spring. Laboratory fee, $10.00. Mr. Lehman.

105. VERTEBRATE HISTOLOGY AND MICROTECHNIQUE (4). Prerequisites, Zoology 103 and 104, or Zoology 103 and special permission of the instructor. Exceptions may be made for students majoring in medical technology.

The preparation of selected tissues and organs for microscopic examination; study of these to acquaint the student with the essentials of histology.

One lecture and six laboratory hours a week, spring. Laboratory fee, $10.00. Mr. Costello.

109. INTRODUCTION TO HYDROBIOLOGY (4). Prerequisites, Zoology 41 and 42.

A study of living organisms in the aquatic habitat, with special reference to the relation of animals to their environment—physical, chemical, and biological.

Two lecture and four laboratory hours a week, fall. Laboratory fee, $7.50. Mr. Jenner.

110. GENERAL PARASITOLOGY (4). Prerequisites, Zoology 41 and 42.
A study of classification, structure, and life cycles of parasites of invertebrates and vertebrates including man; consideration of the arthropods which cause or transmit disease.
Two lecture and four laboratory hours a week, spring. Laboratory fee, $7.50. Mr. Whittinghill.

111. GENETICS (4). Prerequisites, Zoology 41 and 42.
The principles of Mendelian heredity, linkage, mutation, population mechanics, and the relation between genes and environment in development. Laboratory experiments with Drosophila and maize.
Two lecture and four laboratory hours a week, fall. Laboratory fee, $7.50. Mr. Whittinghill.

112. VERTEBRATE FIELD ZOOLOGY (4). Prerequisite, Zoology 103 or special permission of the instructor.
An introduction to the natural history of vertebrates. Lectures on selected topics. Laboratory and field exercises on the identification, habits, and local distribution of amphibians, reptiles, birds, mammals.
Two lecture and six laboratory and field hours a week, spring. Laboratory fee, $7.50. Mr. Engels.

118. EXPERIMENTAL MORPHOGENESIS OF VERTEBRATES (3). Prerequisite, Zoology 104.
A study of problems in vertebrate development relating to determination, differentiation, organogenesis, and regeneration, including the concepts of dependent development, tissue affinities, gradients, and fields.
Three lecture or discussion hours a week, fall. Mr. Lehman.

120. GENERAL PHYSIOLOGY OF ANIMALS (4). Prerequisites, Zoology 41 and 42.
Fundamental chemical and physical principles as applied to living systems. The comparative physiology of osmosis, permeability, movement, respiration, digestion, excretion, and nervous transmission is considered.
Two lecture and six laboratory hours a week, fall. Laboratory fee, $10.00. Mr. Humm.

146. MARINE ECOLOGY (3). Prerequisites, Zoology 41 and 42.
An introductory study of oceanography as it pertains to the ecology of marine organisms; consideration of biological productivity and fisheries problems. Guest lectures by members of the Institute of Fisheries Research.
Three lecture, demonstration, or discussion hours a week and one or more field trips to the coast, spring. Mr. Carriker.

Courses for Graduates

206, 207. MORPHOLOGY AND CLASSIFICATION OF THE INVERTEBRATES (5 each).
Dissection and microsopic study of selected types, with consideration of life histories and phylogeny. Basic course for all graduate work in zoology.
Two lecture and six laboratory hours a week, fall and spring. Laboratory fee, $7.50 a semester. Mr. Beers.

209, 210. EXPERIMENTAL EMBRYOLOGY (5 each). Prerequisite, Zoology 104.
The study of fertilization, cell-lineage, differentiation, and regeneration of invertebrates and vertebrates from the experimental viewpoint.
Four lecture and seminar and two laboratory hours a week, fall and spring. Laboratory fee, $5.00 a semester. Mr. Costello.

212. HYDROBIOLOGY (3). Prerequisite, Zoology 109.

The study of aquatic organisms and environments, with attention restricted to a particular topic, as a small group of animals, a limited set of habitats, or special phenomena of behavior.

Six laboratory and conference hours a week, spring. Laboratory fee, $7.50. Mr. Jenner.

213. ADVANCED MARINE ECOLOGY (3). Prerequisites, Zoology 109 and 146.

A study of the organisms of coastal waters in relation to their physical, chemical, and biotic environments.

Six lecture, seminar, or laboratory hours a week, and one or more field trips to the coast, spring, Laboratory fee, $7.50. Mr. Carriker.

215. PROTOZOOLOGY (3).

Introduction to research in protozoology. The collection, identification, and culture of selected types, chiefly free-living; microtechnical methods; survey of current literature.

Six laboratory and seminar hours a week, fall. Laboratory fee, $7.50. Mr. Beers.

220. CELLULAR PHYSIOLOGY (4). Prerequisites, Zoology 120 and organic chemistry.

The physico-chemical aspects of protoplasm, including permeability, surface tension, pH, cellular metabolism, and other measurable properties of living cells.

Two lecture and four laboratory and problem hours a week, spring. Laboratory fee, $10.00. Mr. Humm.

222. ADVANCED GENETICS (3). Prerequisite, Zoology 111.

The effects of chemical agents in the environment upon inheritance. Reports from the literature chiefly upon chemical mutagenesis. Laboratory experiments on the chemical induction of crossing over.

Six laboratory and conference hours a week, spring. Laboratory fee, $7.50. Mr. Whittinghill.

223. RADIATION GENETICS (3). Prerequisite, Zoology 111.

Study of the action upon living cells of irradiation by X-rays, neutrons, infra-red, ultra-violet, and other forms of radiation. Crossing over and mutations are emphasized.

Three lecture or seminar hours a week, fall. Mr. Whittinghill.

330. RESEARCH IN PROTOZOOLOGY (3 or more).
Mr. Beers.

331. RESEARCH IN INVERTEBRATE ZOOLOGY (3 or more).
Mr. Beers.

332. RESEARCH IN EXPERIMENTAL CYTOLOGY (3 or more).
Mr. Costello.

333. RESEARCH IN EXPERIMENTAL EMBRYOLOGY OF INVERTEBRATES (3 or more).
Mr. Costello.

334. RESEARCH IN CELL PHYSIOLOGY (3 or more).
Mr. Humm.

335. RESEARCH IN HYDROBIOLOGY (3 or more).
Mr. Jenner.

336. RESEARCH IN VERTEBRATE ZOOLOGY (3 or more).
Mr. Engels.

337. RESEARCH IN GENETICS (3 or more).
Mr. Whittinghill.

338. RESEARCH IN PHYSIOLOGY OF LOWER INVERTEBRATES (3 or more).
Mr. Jones.

339. RESEARCH IN EXPERIMENTAL EMBRYOLOGY OF VERTEBRATES (3 or more).
Mr. Lehman.

340. RESEARCH IN MARINE ECOLOGY (3 or more).
Mr. Carriker.

Courses 330 through 340 are designed for applicants for advanced degrees. The work of each of these courses may be continued for two or more semesters under the same course number. *Each course six or more laboratory and conference hours a week, fall and spring. Laboratory fee, $5.00 per 3 semester hours.*

Part Five

DIVISIONS, INSTITUTES, ORGANIZATIONS, AND FOUNDATIONS

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*

The President and Chancellor head each of the divisions, institutes, and organizations listed in Part V except the foundations.

THE UNIVERSITY EXTENSION DIVISION

RUSSELL MARVIN GRUMMAN, B.H., *Director*
CHARLES FREMONT MILNER, A.M. in Educ., *Associate Director and Professor of Education in Extension*
EDGAR RALPH RANKIN, A.M., *Head, Department of School Relations*
WILLIAM JOHN MCKEE, C.E., Ph.D., *Professor of Education in Extension Teaching and Supervisor of Correspondence Instruction*
DWIGHT CARROLL RHYNE, A.M., *Assistant Director*

*The Administrative Board

GORDON W. BLACKWELL, Ph.D., *Professor of Sociology and Director of the Institute for Research in Social Science*
ALBERT COATES, A.B., LL.B., *Professor of Law and Director of the Institute of Government*
NORMAN CORDON, Mus.D., *Director of the North Carolina Music Program*
OLIVER KELLY CORNWELL, M.A., Ed.D., *Professor of Physical Education*
WESLEY CRITZ GEORGE, Ph.D., *Professor of Histology and Embryology*
EARL HORACE HARTSELL, Ph.D., *Associate Professor of English and Director of the Bureau of English Extension*
SAMUEL HUNTINGTON HOBBS, JR., Ph.D., *Professor of Rural Sociology and Research Professor in the Institute for Research in Social Science*
ARNOLD KIMSEY KING, Ph.D., *Professor of Education and Associate Dean of the Graduate School*
STURGIS ELLENO LEAVITT, Ph.D., Litt.D., *Kenan Professor of Spanish and Director of the Institute of Latin American Studies*
HAROLD DIEDRICH MEYER, A.M., LL.D., R.S.D., L.H.D., *Professor of Sociology and Director of the All-University Division of Recreation*
CHARLES FREMONT MILNER, A.M. in Educ., *Associate Director of the Extension Division and Professor of Education in Extension*
GUY BERRYMAN PHILLIPS, M.A., D.Litt., *Professor of Education and Director of the Summer Session*

* The Chancellor, the Director of Admissions and the Dean of Student Affairs are ex officio members of the Board.

SAMUEL SELDEN, A.B., *Professor of Dramatic Art and Director of the Carolina Playmakers*
CORYDON PERRY SPRUILL, A.B., B.Litt. (Oxon.), *Professor of Economics and Dean of the General College*
LOUIS ROUND WILSON, Ph.D., Litt.D., LL.D., L.H.D., *Professor of Library Science and Administration*
REX SHELTON WINSLOW, Ph.D., *Professor of Economics and Director of the Bureau of Business Services and Research*
HARRY DEMERLE WOLF, Ph.D., *Professor of Economics and Director of the Institute of Industrial Relations*
EARL WYNN, M.S., *Professor of Radio, Television, and Motion Pictures, and Director of the Communication Center*

Heads of Bureaus

JOHN VOLNEY ALLCOTT, M.A., *Art Extension*
JOHN WILLIAM PARKER, A.M., *Community Drama*
GLEN HAYDON, Ph.D., *Community Music*
GORDON W. BLACKWELL, Ph.D., *Community Organization*
MARY ELIZABETH HENRY, A.B., *Correspondence Instruction*
SAMUEL HUNTINGTON HOBBS, JR., Ph.D., *Economic and Social Surveys*
H. ARNOLD PERRY, Ed.D., *Educational Research and Service*
EARL HORACE HARTSELL, Ph.D., *English Extension*
HARRY DEMERLE WOLF, Ph.D., *Institute of Industrial Relations*
HAROLD DIEDRICH MEYER, A.M., LL.D., R.S.D., L.H.D., *Recreation*
KENNETH MURCHISON MCINTYRE, M.Ed., *Visual Education*

Heads of Cooperative Services

REX SHELTON WINSLOW, Ph.D., *Director, Bureau of Business Services and Research*
EARL WYNN, M.S., *Director, The Communication Center*
MARY C. HOPKINS, A.B., B.L.S., *Head, Library Extension Department*
LINDSAY JACKSON PERRY, M.A., *Executive Secretary, North Carolina High School Athletic Association*
NORMAN CORDON, Mus.D., *Director, North Carolina Music Program*
BENJAMIN SWALIN, Ph.D., *Professor of Music in Extension and Director of the North Carolina Symphony Society*
EMORY S. HUNT, A.B., *Administrative Assistant in Continuation Education*

General Statement

By means of correspondence instruction, extension classes, public forums, adult discussion groups, lecture series, extension library service, reading courses, community dramatics, interscholastic activities, audio-visual aids, and a variety of publications, the University of North Carolina, through the Extension Division, is relating itself closely with the life of North Carolina. The University campus is now virtually conterminous with the boundaries of the commonwealth.

Starting as a Bureau of Extension in 1912 under the leadership of Dr. L. R. Wilson, former University Librarian, the idea of University extension was clarified and expanded during the administration of the late President Edward Kidder Graham. In 1921, in conformity with

standards established by the National University Extension Association, the work was organized as a major division of the University by President Harry W. Chase.

In his inaugural address, November, 1931, former President of the University, Frank Porter Graham defined the purposes of university extension thus: "It is the function of the state university not only to find its bits of truth and teach the truth gathered from scholars everywhere, but to carry the truth to the people that they may take it into their lives and help to make it prevail in world affairs. It is the ideal of the University Extension Division to make the resources of the universities, the discoveries of science, and the findings of the social scientists available for the people of the commonwealth."

The Extension Division is the administrative agency through which are conducted the extension activities of all the University's departments. Within recent years, moreover, the Division has developed programs of adult education. Other educational services are being offered men and women whose formal schooling has ended but who still desire to continue their education regardless of higher academic awards. In meeting the demands of this group, the future of the University Extension Division as an agency for adult education holds the greatest promise of development.

Separate catalogues and announcements of the various services are published by the University Extension Division, including Correspondence Instruction, Audio-Visual Aids, Program Services, School Tests and Materials, etc.

Bureau of Art Extension

The Department of Art offers, through the cooperation of the Extension Division, extension classes and correspondence courses in the history and appreciation of art. Institutes on art education are sponsored jointly with other state agencies and organizations. A lecture service is available. Circulating art exhibits may be secured on a loan basis. The annual North Carolina School Art Exhibition is conducted in cooperation with the Woman's College.

All of the special exhibitions in the Person Hall Art Gallery are open to the general public.

Bureau of Class Instruction

Extension courses in regular University subjects are offered in communities throughout the state. These courses are taught by members of the University faculty and, when all requirements are met, give the same credit as courses in residence. Those not wishing degree credit are also eligible to enroll in extension classes. The classes usual-

ly meet one evening a week for sixteen weeks. An individual or group wishing to organize an extension class should make written application to the University Extension Division, giving the following information: probable number of enrollments, academic qualifications of persons who wish to join the class, course desired, when and where the class wishes to meet, and who will have charge of local arrangements.

The services of a full-time Professor of Education in Extension Teaching are available for graduate instruction and other professional services in county and city school systems.

Bureau of Community Drama

The services of the Bureau of Community Dama are available to all schools, colleges, and communities throughout the state. Suggestions and advice on play production and direction may be obtained from this bureau.

Assistance is given in organizing, play selecting, the designing and making of scenery, costuming, and make-up and lighting. Arrangements may be made for assistance in the direction of a chosen play.

The bureau has at its disposal more than two thousand volumes of playbooks, books on acting, play production, little theatre organization, playwriting, stagecraft, lighting, costuming, make-up, etc. These are loaned upon payment of the postage and packing charges. By giving practical assistance to those interested in writing and producing plays, the bureau is seeking to promote and encourage dramatic art in the schools and communities of North Carolina and to stimulate interest in the writing of native drama.

Bureau of Community Music

The Department of Music offers the following services: (1) leadership for community sings; (2) formation of community choruses; (3) lectures on public school and community music; (4) piano, violin, organ, and chamber music recitals; (5) advisory service to schools; (6) concerts by the University Symphony Orchestra, the Symphonic Band, and the University Glee Clubs; (7) extension courses in music appreciation.

Bureau of Community Organization

The services of this bureau consist of consultation and assistance to North Carolina localities in the expanding field of community organization. Cities, towns, and rural communities alike are facing serious problems of community coordination and effective citizen action for community improvement. A number of localities already have community councils or councils of social agencies to help meet these needs.

Plans of the Bureau of Community Organization include the preparation of materials for local leaders, conferences and institutes, assistance in local fact finding, demonstration projects, a state-wide advisory committee on Community Organization, and collaboration with national agencies and with community organization programs in other states.

The Institute for Research in Social Science cooperates with the Bureau in conducting research activities.

Bureau of Correspondence Instruction

All information and regulations concerning correspondence courses offered by the University are contained in the Catalogue of Correspondence Instruction issued separately. This includes information for those interested in adult education and those desiring courses for degree credit or teachers' certification credit. The University of North Carolina accepts 30 semester hours' credit toward an undergraduate degree. It is expected that the last year's work will be taken in residence. Special cases will be handled individually.

Bureau of Economic and Social Surveys

For years the staff in Rural Sociology of the Department of Sociology and Anthropology of the University has been collecting data on social and economic conditions in North Carolina. This material is available through loans from the library, articles in *The University of North Carolina News Letter,* and bulletins which record the results of a number of county surveys. The *News Letter,* which is edited by S. H. Hobbs, Jr., assisted by members of the Institute for Research in Social Science, appears fifteen times each year.

Bureau of Educational Research and Service

The bureau is maintained through the cooperation of the School of Education. The several members of the faculty of the School offer to the state the following services: educational tests and measurements; school surveys; teachers' appointments; advice and counsel with reference to school buildings, equipment, and general administrative problems.

Most of the better known and most valuable standardized school tests are collected here for prompt distribution at publishers' prices. Both time and transportation costs of these tests may be saved by ordering from this office.

A committee composed of members of the staff of the School of Education serves in an advisory capacity in evaluating new publications and in approving those best suited to meet specific needs in different school situations.

A catalogued listing of tests and materials may be had upon request by writing to, School Tests and Materials Office, Box 1050, Chapel Hill, North Carolina.

Bureau of English Extension

In cooperation with the Department of English, the Division conducts professional services for teachers of high school English. The North Carolina High School English Institute is held each summer. The head of the Bureau serves as executive secretary of the North Carolina English Teachers Association and managing editor of the *North Carolina English Teacher.*

Services to teachers and students of English provided by the Bureau include: (1) Publication and distribution of the *North Carolina English Teacher,* Volume XI (four regular issues and the annual Student Issue). About 1300 teachers and 2100 students are served directly by the publication. (2) Professional meetings and conferences with estimated combined attendance of over 1000. (3) Committee activities of the North Carolina English Teachers Association, coordinated by the Bureau. (4) Maintenance of exchange service with other state and regional associations. (5) Answering inquiries. (6) Keeping permanent records of English-teaching activities.

Institute of Industrial Relations

Established in the spring of 1946, the Institute serves as the coordinating agency of the University and the Extension Division for the promotion and direction of educational programs in labor-management relations and programs of workers' education. Short courses, workshops, and institutes are conducted in cooperation with representatives of both management and labor organizations.

Bureau of Lectures, Short Courses, and Institutes

The University conducts a lecture bureau for the purpose of aiding schools, civic clubs, and other organizations in obtaining speakers and public forum leaders. Addresses for special occasions, such as school and college commencements, are also arranged upon application.

No fee for lecture service is charged, but the traveling and incidental expenses of the lecturer are to be defrayed by the organization for which the lecture is made. Lecture courses and public forum programs also may be arranged. An Extension Bulletin on "Program Services" is available without charge.

From time to time the University has held at Chapel Hill and at other places short courses or institutes for various organizations and

groups. These consist of an intensive training program or course ranging in duration from one day to two weeks. The program is composed of a specialized series of lectures, discussions, and demonstrations directed by leading speakers and teachers secured from the faculty of the University and from the state and nation. Short courses have been offered to public health nurses, welfare workers, parents, realtors, photographers, bankers, insurance agents, members of the State Press Association, the North Carolina Medical Society, and other organizations.

In addition to those mentioned above, the Division will be glad to aid other organizations or groups in arranging for a short course, institute, special meeting, or convention.

Bureau of Recreation

This bureau offers service in public recreation and leisure time problems through the department of Sociology. Bibliographies and reading lists on the subject of sociology, community organizations, etc., are provided upon request. The Bureau Head serves as Consultant to the North Carolina Recreation Commission.

Bureau of School Relations

The University Extension Division, through this bureau, offers service to the high schools of the state by means of annual contests in debating, public speaking, and academic subjects, and through the agency of the North Carolina Scholastic Press Institute.

The North Carolina High School Debating Union is the medium through which assistance in debate is offered. This organization was established in 1912-13. Approximately one hundred high schools discuss some important question each year. The district winners come to the University in the spring to compete in the final contest for the Aycock Memorial Cup.

The High School World Peace Study and Speaking Program was started during the school year 1946-47. About two hundred high schools have participated annually in the discussion of such subjects as: "What is the Responsibility of the United States in World Affairs?"; "How Can We Help to Build World Peace in the Atomic Age?"; "What Have Been the Achievements and What Are the Prospects of the United Nations?"; "How Can the United Nations Prevent Communist Aggression and Preparation for Aggression?"; and "The Role of the United Nations in the Building of World Peace."

The high school contests in academic subjects are conducted jointly by this bureau and by the several University departments concerned. Academic contests are conducted in Latin, Spanish, French,

physics, and mathematics. Tuition scholarships for one year in the University are now offered to the winning students in these contests.

Approximately 250 high school students and faculty advisers come to the University in the fall for the two-day sessions of the annual North Carolina Scholastic Press Institute.

Bureau of Visual Education

The audio-visual materials and services of the Bureau of Visual Education are available to all schools, colleges, civic groups, and other agencies on a non-profit basis. The services are designed primarily to aid any group with the selection, distribution, and utilization of educational films and other audio-visual materials to fit their needs. A recent development which provides production of transparencies for overhead projection has also been added.

The Bureau of Visual Education now operates an adult film project in conjunction with the North Carolina Library Commission. Films for community programs, business and industry and other adult groups are made available each month to a number of public libraries participating in this project. These films cover such subjects as human relations, fine arts, international affairs, and personnel relations. Anyone interested in this service will be furnished detailed information on request.

A Film Forum on World Affairs is sponsored for adult groups by the University Extension Division. The film forum consists of meetings in each of which a film is shown to focus attention on one major issue of American foreign policy or a problem of world peace. Film forums in areas such as music, art, and human relations may be arranged on request to suit the needs of individual groups.

The Bureau of Visual Education is also prepared to offer advisory services and information on other types of film discussion programs, audio-visual materials, equipment, and services. The film rental service is described in the *University Extension Bulletin,* Vol. XXXIII, No. 1, "Audio-Visual Aids to Schools, Colleges, Churches, and Adult Study Groups."

COOPERATIVE SERVICES

Bureau of Business Services and Research

Extension of educational resources of the University to business and industry is accomplished by means of cooperative arrangements with the Bureau of Business Services and Research of the School of Business Administration. (See section of catalogue on the School of Business Administration for a description of this agency.) The Extension Division sponsors and services the adult education program for businessmen developed by the Bureau.

The most frequent components of this program are "Management Institutes" which are conducted annually in conjunction with trade associations of various lines of business such as bankers, realtors, wholesalers, furniture dealers, etc.

The program also includes conferences and short courses in functional areas of business management such as accounting, personnel, production, and insurance. These are conducted both on and off the campus for the benefit of business firms irrespective of trade lines.

The School of Business Administration has reserved specially equipped rooms and facilities for adult education programs. A branch office of the Extension Division has been established in these facilities to enable it to render service more effectively.

The Communication Center

The Communication Center is primarily a laboratory to the Department of Radio, Television, and Motion Pictures. Through such services, however, as WUNC radio, recording, graphic presentation, and still photography the Communication Center provides an extension of the University to the people of North Carolina. (See Communication Center pp. 384). By means of these communication tools and WUNC-TV, much of the University's vast well of knowledge may be visualized, auralized, and distributed through North Carolina, providing thus a wider educational opportunity for those who wish to learn.

Library Extension Department

The aim of the Library Extension Department of the University Library is to encourage discussion of current political, social, and economic problems, as well as to assist in the study of good literature. Reference material is supplied for such study.

One section renders assistance with programs and reference material, usually of a literary nature, to women's clubs and study groups, for which service a small charge is made. Another section renders assistance to schools, both students and teachers, as well as to other individuals not organized in group study. This material is usually on current problems of a political, social, or economic nature.

North Carolina High School Athletic Association

The North Carolina High School Athletic Association is the agency through which assistance in athletics is offered. This association conducts state high school contests in football, basketball, baseball, track, swimming, six-man football, golf, and tennis. The high schools compete in districts for the honor of representing the eastern and western sections of the state, and the teams winning the sectional contests meet in the finals to determine state championships.

North Carolina Music Program

Dr. Norman Cordon, formerly of the Metropolitan Opera Association, is a member of the staff of the University Extension Division and available for cooperative services with schools, churches, colleges, and other community and state organizations. Assistance has been given to the North Carolina Symphony Society, the Carolina Folk Festival, and to the North Carolina Federation of Home Demonstration Clubs. Dr. Cordon also conducts, under the Adult Education Program of the Extension Division, the Opera Film Forum and his program "Let's Listen to Opera" which is heard weekly over the University's radio station WUNC-FM, Fridays at 8:30 p.m.

North Carolina Symphony Society

Dr. Benjamin F. Swalin, Director of the Symphony Society and Conductor of the North Carolina Symphony Orchestra, is also Professor of Music in Extension. The North Carolina Symphony receives a biennial appropriation from the General Assembly, and is a cooperating service of the University Extension Division. Its headquarters are on the campus of the University and the Director of Extension is Executive Vice-President of the Symphony Society.

Division of Health Affairs

In cooperation with the Division of Health Affairs, the Extension Division throughout the school year conducts postgraduate medical courses for physicians in various sections of the state. It assists in the administration of the Continuation Education Program of the School of Public Health. Plans are being made to organize extension programs for the School of Dentistry, the School of Nursing, and the North Carolina Memorial Hospital. Short refresher courses in dentistry are offered both on and off the campus.

DIVISION OF HEALTH AFFAIRS

The Division of Health Affairs of the University includes the Schools of Medicine, Dentistry, Public Health, Nursing, and Pharmacy, and the North Carolina Memorial Hospital. It was established for the purpose of integrating and correlating the work of these professional schools and the hospital in their teaching and research programs within the University. Equally important, the Division through its Administrator and Advisory Board will attempt to correlate the teaching, research, and service functions of the University Health Center with the hospital and health agencies and services throughout the state.

Administratively the Division is under the direction of a full-time medical administrator, with an Advisory Board on which are the deans of the various professional schools concerned and the Director of the Hospital.

Advisory Board

HENRY TOOLE CLARK, JR., A.B., M.D., *Administrator of the Division of Health Affairs*
WALTER REECE BERRYHILL, A.B., M.D., *Dean of the School of Medicine*
JOHN CHARLES BRAUER, A.B., D.D.S., M.Sc., *Dean of the School of Dentistry*
EDWARD ARMOND BRECHT, Ph.D., *Dean of the School of Pharmacy*
ROBERT RANDALL CADMUS, A.B., M.D., *Director of the North Carolina Memorial Hospital*
ELIZABETH LOUANNA KEMBLE, R.N., Ed.D., *Dean of the School of Nursing*
EDWARD GRAFTON MCGAVRAN, A.B., M.D., M.P.H., *Dean of the School of Public Health*
OSLER LUTHER PETERSON, B.A., M.D., M.P.H., *Director of the Program Planning Section, Division of Health Affairs*

THE ALL-UNIVERSITY DIVISION OF RECREATION

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
CAREY HOYT BOSTIAN, Ph.D., *Chancellor of the North Carolina State College of Agriculture and Engineering*
EDWARD KIDDER GRAHAM, Ph.D., *Chancellor of the Woman's College*
HAROLD D. MEYER, M.A., LL.D., R.S.D., L.H.D., *Director*

Advisory Board

C. HORACE HAMILTON
OLIVER K. CORNWELL
DOROTHY DAVIS
THOMAS I. HINES
ETHEL L. MARTUS
HAROLD D. MEYER
SAMUEL SELDEN

The All-University Division of Recreation was established by the Board of Trustees in 1947. The growth of recreation throughout the nation, and the demand for recreation leaders, centered interest in the University on its responsibility to train leaders for this field. For some time in the University at Chapel Hill there has been opportunity to train for recreation leadership. At the State College of Agriculture and Engineering, curriculum interest is centered around the training of leaders for recreation in industry and rural life. The course interest at the Woman's College is in the training of community recreation leaders and workers in youth-serving agencies.

The All-University Division is designed to coordinate services, cooperate in the development of curricula, and integrate programs and activities.

The Division works in close cooperation with the North Carolina Recreation Commission and the North Carolina Recreation Society.

COMMUNICATION CENTER

EARL WYNN, *Director*
*ROBERT F. SCHENKKAN, *Associate Director, Programming*
ROSS SCROGGS, *Associate Director, Electronics, Graphics, Photography*
JOHN S. CLAYTON, *Assistant Director, Production*
JOHN M. EHLE, *Assistant Director, Writing*
SARAH ROSS HAMPTON, *Assistant Director, Finance*
MACK PRESLAR, *Assistant Director, Operations Manager*
JOHN E. YOUNG, *Assistant Director, Manager WUNC*
MARION DAVIS, *Secretary*
EDYTHE SANFORD, *Secretary*

Communication Standing Committee

RUSSELL MARVIN GRUMMAN, *Chairman*

O. K. CORNWELL
J. C. LYONS
W. A. OLSEN
EARL SLOCUM
W. S. SPEARMAN
EARL WYNN

The Communication Center functions as a laboratory for the Department of Radio, Television, and Motion Pictures and as a production agency for the University and the state. It operates an FM educational radio station, WUNC; a photographic laboratory; a graphics laboratory; radio production studios; a recording studio; and a television and motion picture production laboratory. These facilities are used by students in the instructional program of the Department and for the production of programs and materials for use at the University and to extend the University to the people of the state.

WUNC

WUNC is a non-commercial educational FM radio station licensed by the Federal Communications Commission to the University of North Carolina. It is in its third year of operation. A gift by the Jefferson Standard Broadcasting Company of a 10,000 watt transmitter will permit the station to increase its power to approximately 16,000 watts early in 1955.

The operating staff is composed entirely of students participating voluntarily. Programs of an educational nature exclusively are broadcast by the station. In addition to locally originated programs, the station broadcasts features from the network of the National Association of Educational Broadcasters, the British Broadcasting Corporation, French Broadcasting System, and programs from other United States and foreign production agencies. Approximately 50% of WUNC's programming is serious music.

* Absent on leave.

The Photographic Laboratory

The Photographic Laboratory of the Communication Center serves the photographic needs of most of the various departments and divisions of the University, including the Division of Health Affairs. The demand for its services has increased yearly, showing a sharp rise during the past year as a result of increasing needs for medical photography. The Photographic Laboratory also serves as the workshop for the instructional program in photography.

The Graphics Laboratory

The Photographic Laboratory operates, in addition, a graphic arts service for the purpose of supplying posters, graphs, charts, and illustrations. For the time being this service is supplied only when requested. At such a time as the demand justifies, full-time service will be offered.

Radio Production

Radio production at the University of North Carolina may be considered under three general categories:

The first is a function of the Department of Radio, Television, and Motion Pictures: to offer the opportunity for students enrolled in radio production courses to participate in creative work through which and in which they may learn about themselves and the world of which they are a part.

In the Department, opportunity also exists in radio production for the learning of specific techniques now employed in the commercial field of radio, for absorbing through outside reading and through classroom participation something of the heritage which has produced our present day forms, and for building criteria which will permit the development of a deepened appreciation and criticism of what is being produced in the field.

In the Communication Center programs are produced with the hope that they are appropriate to the aims and objectives of a great university. The Communication Center has been encouraged by its sponsors, by its listeners, by the community, and by the awards of critical groups in the field that it is in part consistently realizing these objectives. Students, faculty members, townspeople, and visitors have had and will continue to have an opportunity to participate in this endeavor which is perhaps best characterized by the name of one of its program series, the *American Adventure.*

Recording

During the past year, the recording studio of the Communication Center has produced over 500,000 feet of magnetic tape recordings, and has cut over 500 separate discs. Contents of these transcriptions have varied from simple 20-second spot announcements to thirty-minute dramatic productions aired on national networks. The recording studio is equipped to record on tape or disc, or to make transfers from tape, disc, or film including synchronous tracks for films. It functions as a laboratory for the Department of Radio, Television, and Motion Pictures and as a service to the campus.

Television and Motion Picture Laboratory

The Communication Center also operates a studio, control room, and cutting room for television and motion picture laboratory production. Equipped with Vidicon television cameras, control units, lighting equipment, 16mm motion picture cameras, and editing equipment, these facilities will be used in the instructional program of the Department of Radio, Television, and Motion Pictures and for program research and experimentation.

Research

The Communication Center is not primarily a research organization; however, the need is recognized for research in the mass media of communication particularly through the cooperative efforts of production experts and social scientists. In matters of research the Communication Center will cooperate closely with the University Institute for Research in Social Science, the School of Journalism, and the Department of Radio, Television, and Motion Pictures.

THE UNIVERSITY TESTING SERVICE

WILLIAM D. PERRY, Ed.D., *Director*
JAMES W. LITTLE, M.S., *Associate Director*
PHINNEY CAMPBELL, A.B., *Reading Instructor*
PAUL IRVINE, M.A., *Vocational Counselor*
EARL J. SPENCE, M.S., *Vocational Counselor*
MILDRED F. WOODWARD, M.A., *Psychometrist*
CLARA S. PATTY, *Secretary-Librarian*
HELEN C. JOHNSON, A.B., *Secretary*
ELIZABETH M. HENDERSON, A.B., *Secretary*
EMILY S. REDDING, *Psychometrist*
ARTHUR O. LINSKEY, M.A., MARCUS B. WALLER, A.B., *Personnel Interns*

The University Testing Service was established in 1937 primarily for the purpose of administering and scoring tests and for test research.

Its activities were greatly expanded, beginning in 1945, as the result of a contract with the Veterans Administration to provide vocational guidance for veterans. Since that time, more than 7500 veterans, many of them partially disabled, have been tested and counseled. As the result of a decision by the University to extend these same services without charge to students, vocational counseling of University students has become one of the major functions of the University Testing Service. More than 3000 University students have received a comprehensive battery of tests and a series of interviews with vocational counselors on the Testing Service staff. The vocational guidance program for students has been especially designed to be of maximum assistance to those students who have been unable to select a suitable academic major, who are uncertain about their vocational choice, or who are encountering serious academic difficulties.

In addition to the test scoring and test research work, which have been carried on since 1937 and have been facilitated by the use of an I.B.M. scoring machine and graphic item counter, the University Testing Service has engaged in several closely related activities. A remedial reading program has been operated for the benefit of University students who wished to improve their reading skills. A cross indexed occupational information library is maintained for the use of University students who wish to acquire detailed information regarding job requirements, duties, rates of pay, training courses, and employment outlook. The University Testing Service is an approved agency for the administration of seven national testing programs and participates in testing projects sponsored by other universities and colleges and by such organizations as the State Department of Public Instruction, the State Education Commission, and the North Carolina College Conference.

The University Testing Service assists and works in cooperation with other departments and agencies of the University in administering, scoring, and interpreting tests; arranging for specialized testing programs; compiling and analyzing test data; and reporting the results of testing and counseling for those students who request it after completing the vocational guidance program.

THE FOLKLORE COUNCIL

RUSSELL MARVIN GRUMMAN, *Chairman*
ARTHUR PALMER HUDSON, *Vice-Chairman*
ROBERT WHITE LINKER, *Secretary-Treasurer*

*Executive Committee

GLEN HAYDON
ROBERT BURTON HOUSE
NORMAN CORDON
JOHN VOLNEY ALLCOTT

†Advisory Board

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JOHN GILLIN
PAUL GREEN
ISAAC GARFIELD GREER
JOHN HARDEN
JOHN ESTEN KELLER
PHILLIPS RUSSELL
SAMUEL SELDEN
MANLY WADE WELLMAN
CRATIS D. WILLIAMS
GEORGE WILSON
MRS. L. A. WILSON

The Folklore Council was organized in September, 1935, to promote the cooperation and coordination of all those interested in folklore and to encourage the collecting and preserving, the study and interpretation, the active perpetuation and dissemination of all phases of folklore. Folklore is defined by the Council as embracing all cultural aspects of folk life.

The Council represents a reorganization of The Institute of Folk Music, which was started in September, 1931, and which now becomes a division of the Council. It was found that there was need for a comprehensive organization to unify and stimulate membership of the former Institute of Folk Music.

The Institute of Folk Music

JAN PHILLIP SCHINHAN, *Director*
GLEN HAYDON, *Associate Director*

Advisory Board

BASCOM LAMAR LUNSFORD
PAUL GREEN
GEORGE HERZOG
BERTRAND H. BRONSON
JOHN POWELL
HELEN ROBERTS
CHARLES SEEGER
LAMAR STRINGFIELD
CHARLES G. VARDELL

FUNCTIONS OF THE INSTITUTE

As defined by the Council, folklore embraces all cultural aspects of folk life. In all lands the latter is closely allied to, and interwoven

* The three general officers named above are members of the Executive Committee.
† All members of of the full Executive Committee are members of the Advisory Board.

with, music in its various manifestations: as song, dance, or religious worship.

The Institute of Folk Music has varied, through related, aims:

1. The collection and preservation of indigenous material, as found in the various regions of the state.

2. The perpetuation of traditional songs, dances, and hymns through teaching traditional music in the schools and communities, as well as organizing county folk festivals and "old-time-music" conventions.

3. The scientific study, analysis, and interpretation of all the collected material.

4. The furtherance of composition based on folk music.

The Department of Music collaborates in the accomplishment of these ends, not only indirectly through its instruction in theoretical and applied music, but more particularly through courses in folk music and comparative musicology which are designed for the training of workers in this field.

INSTITUTE OF GOVERNMENT

ALBERT COATES, A.B., LL.B., *Director of the Institute of Government*

VERNON LEE BOUNDS, LL.B., *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*

GEORGE HYNDMAN ESSER, JR., B.S., LL.B., *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*

PHILLIP PALMER GREEN, JR., A.B., LL.B., *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*

DONALD BALES HAYMAN, A.M., *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*

HENRY WILKINS LEWIS, A.B., LL.B., *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*

JOHN ALEXANDER MCMAHON, A.B., LL.B., *Assistant Director of the Institute of Government and Research Professor in Public Law and Government*

BASIL LAMAR SHERRILL, A.B., J.D., *Assistant Director of the Institute of Government and Associate Research Professor in Public Law and Government*

ROBERT EDWARD GILES, B.S. Comm., J.D., *Assistant Director of the Institute of Government and Assistant Research Professor in Public Law and Government*

JOSEPH P. HENNESSEE, A.B., J.D., *Assistant Director of the Institute of Government and Assistant Research Professor in Public Law and Government*

PAUL ALEXANDER JOHNSTON, A.B., LL.B., *Assistant Director of the Institute of Government and Associate Research Professor in Public Law and Government*

EDWARD LANE-RETICKER, A.B., LL.B., *Assistant Director of the Institute of Government and Associate Research Professor in Public Law and Government*

RODDEY MILLER LIGON, JR., S.B., LL.B., *Assistant Director of the Institute of Government and Associate Research Professor in Public Law and Government*

RICHARD ALBERT MYREN, B.S. in Chem., LL.B., *Assistant Director of the Institute of Government and Associate Research Professor in Public Law and Government*

JAMES C. N. PAUL, A.B., LL.B., *Assistant Director of the Institute of Government and Assistant Research Professor in Public Law and Government*

The Institute of Government grew out of the classroom of a professor in the University of North Carolina in the 1920's. It developed into a program of action supported by city, county, state, and federal officials in North Carolina during the 1930's. It became an integral part of the structure of the greater University of North Carolina in January, 1942. Its advisory board consists of three city officials representing the city and town governing boards, three county officials representing the county governing boards, three members of the North Carolina Senate, three members of the North Carolina House of Representatives, and four state officials representing the state government. This governing board functions under the chairmanship of Chief Justice William Augustus Devin, of the Supreme Court of North Carolina, who has been chairman of the Institute of Government Executive Committee from the beginning.

The Institute of Government unites public officials, private citizens, and students and teachers of civics and government in a systematic effort to meet definite and practical needs in North Carolina.

(1) It seeks to coordinate the efforts and activities of city, county, state, and federal officials who have been working for one hundred and fifty years on the same problems, for the same people, in the same territory, in overlapping governmental units, without coming together in systematic and continued cooperative activity—in the effort to eliminate needless duplication, friction, and waste.

(2) It seeks to bridge the gap between outgoing and incoming public officials at the end of their two- or four-year terms by organizing and transmitting our steadily accumulating governmental experience to successive generations of public officials—in the effort to cut down the lost time, lost motion, and lost money involved in a rotating governmental personnel.

(3) It seeks to collect and correlate for each group of public officials the laws governing their powers and duties now scattered through a multiplicity of books to the point of practical inaccessibility in constitutional provisions, legislative enactments (including public-local and private laws), municipal ordinances, and court decisions—in the effort to make them conveniently available for practical use.

(4) It seeks to collect and compare the different methods of doing similar things arising out of the initiative and resourcefulness of officials in a hundred county courthouses, three hundred city halls, and scores of state departments and federal agencies—in the effort to raise the standards of governmental performance by lifting the poorest practices to the level of the best.

(5) It seeks to bridge the gap between government as it is taught in schools and as it is practiced in city halls, county courthouses, state departments, and federal agencies.

(6) It seeks to provide the machinery for putting the people in touch with their government and keeping them in touch with it.

(7) It seeks to build a demonstration laboratory and clearinghouse of governmental information to which successive generations of officials, citizens, and students and teachers of government may go to see demonstrated in one place the methods and practices in government they would now have to go to one hundred counties, about three hundred cities and towns, and a score or more of state departments to find—and would not find practically available for use when they had reached these sources.

The Institute of Government is working with officials and citizens and the schools to achieve the foregoing objectives through comparative studies of the structure and workings of government in the cities, counties, and state of North Carolina, by staff members going from one city hall, county courthouse, state department, and federal agency to another, collecting, comparing, and classifying the laws and practices in books and in action. It is setting forth the results of these studies in guidebooks, demonstrating them in laboratories, teaching them in training schools, keeping them up to date, and transmitting them through a clearinghouse of governmental information for officials, citizens, and teachers of civics and government in the schools.

The School of Law and the Institute of Government

The School of Law and the Institute have embarked upon a program through which the School of Law and its students will receive the benefit of the specialized experience of the members of the Institute staff. From time to time they will, as Lecturers in Law, teach significant portions of the School of Law courses which have heretofore been taught by Mr. Coates—Criminal Law and Procedure, Municipal Corporations, Legislation, and Family Law. It is believed that this marks a significant development which will contribute much to the training of students for civic leadership and public office, as well as for professional competence.

The Department of Political Science and the Institute of Government

The Department of Political Science and the Institute of Government are co-operating in a program through which the Department of Political Science and its students will receive the benefit of the specialized experience of the Institute of Government and its staff. From time to time, as Lecturers in Political Science, they will teach particular courses and conduct seminars within the field of their par-

ticular competence, under the rules and regulations of the Graduate School.

The Department of Political Science believes that this marks a significant development which will contribute much to the training of its students for civic leadership and public service as well as for professional competence.

THE INSTITUTE FOR RESEARCH IN SOCIAL SCIENCE

GORDON WILLIAMS BLACKWELL, Ph.D., *Director*
KATHARINE JOCHER, Ph.D., *Assistant Director*

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Research Staff

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FRANCIS STUART CHAPIN, JR., M.C.P., *Research Associate*
FREDERIC NEILL CLEAVELAND, Ph.D., *Research Associate*
NICHOLAS JAY DEMERATH, Ph.D., *Research Professor*
‡ELIZABETH MARSHALL FINK, M.A., *Executive and Editorial Assistant*
DANIEL GALLIK, A.B., *Research Associate*
†JOHN PHILIP GILLIN, Ph.D., *Research Professor*
FLETCHER MELVIN GREEN, Ph.D., *Kenan Research Professor*
GEORGE CAVERNO HAM, M.D., *Consultant in Psychiatry*
GEORGE ALEXANDER HEARD, Ph.D., *Research Professor*
MILTON SYDNEY HEATH, Ph.D., *Research Professor*
HARRIET LAURA HERRING, A.M., *Research Associate*
REUBEN HILL, Ph.D., *Research Professor*
SAMUEL HUNTINGTON HOBBS, JR., Ph.D., *Research Professor*

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* Executive Committee.
† Absent on leave, 1954-1955.
‡ Resigned November 1, 1955

JOHN JOSEPH HONIGMANN, Ph.D., *Research Associate*
FLOYD GIBSON HUNTER, Ph.D., *Research Associate*
KATHARINE JOCHER, Ph.D., *Research Professor*
GUY BENTON JOHNSON, Ph.D., *Research Professor*
JOSEPH ALAN KAHL, Ph.D., *Research Associate*
HAROLD GRIER MCCURDY, Ph.D., *Research Associate*
HAROLD DIEDRICH MEYER, A.M., LL.D., R.S.D., L.H.D., *Research Professor*
GEORGE EDWARD NICHOLSON, JR., Ph.D., *Research Associate*
EDWARD WILLIAM NOLAND, Ph.D., *Research Professor*
*HOWARD WASHINGTON ODUM, Ph.D., LL.D., Litt.D., L.H.D., *Emeritus Research Professor*
JOHN ALBERT PARKER, M.C.P., *Research Professor*
DANIEL O'HAVER PRICE, Ph.D., *Research Professor*
GEORGE LEE SIMPSON, JR., Ph.D., *Research Professor*
HARVEY LISS SMITH, Ph.D., *Research Associate*
JOHN WALTER THIBAUT, Ph.D., *Research Associate*
VALENTIN IVANOVICH TSONEV, M.E., *Research Associate*
RUPERT BAYLESS VANCE, Ph.D., LL.D., *Kenan Research Professor*
GEORGE SCHLAGER WELSH, Ph.D., *Research Associate*
KERR LACHLAN WHITE, M.D., *Research Associate*

The Institute for Research in Social Science was founded in 1924 by Howard W. Odum, who served as director for the first twenty years. Its relation to the central administration of the University is somewhat analogous to that of the schools and major divisions of the institution. Its research professors and research associates generally have the rank of professors and associate or assistant professors in the University, with all their privileges and obligations. Approximately one-third to one-half of their time is allocated to research with the remainder devoted to teaching in one of the social science or related departments. A Board of Governors is composed of representatives from the University administration, the social science departments, and other agencies within the University with which the Institute cooperates. This body determines basic policies, with details of administration delegated to the Director and staff. An Executive Committee of five members, elected from the Board of Governors, acts for the Board between meetings and handles certain matters for the Board.

Regionalism and the achieving of an understanding of the State and the South have been dominant themes in the research program.

Major functions of the Institute are: (1) to encourage and stimulate research in the social sciences at the University of North Carolina and to map out and plan for a coordinated and integrated research program; (2) to discover and develop research personnel and to serve as a training center for research and planning personnel and for teachers, achieving this purpose in collaboration with the several social science departments of the Graduate School; (3) to use a re-

* Died November 8, 1954.

gional framework for developing methods of empirical research within a theoretical context; (4) to serve as a center for cooperation with other agencies toward the development and testing of procedures for making this research of more functional value.

The research staff of the Institute is composed of research professors, research associates, research fellows, and research assistants in anthropology, economics, history, political science, psychiatry, public administration, regional and city planning, social and clinical psychology, social aspects of health and medicine, sociology, and statistics. Research fellows are mature graduate students equipped by training and experience to carry on special research assignments, usually under individual or committee direction. Graduate research assistants serve on annual appointment and generally carry four-fifths of a regular graduate study program. They assist in Institute research projects or serve in staff capacities under supervision, thereby securing valuable experience and training. In addition, part-time arrangements are made with other individuals, usually on the University faculty, in accordance with the research programs developed from year to year.

Recently the Institute has added to its earlier and continuing research program in state and regional research a widening program in social research financed largely by foundation funds together with research projects sponsored by federal agencies. Current research projects may be grouped under communication, community organization, complex social organization, criminology, cultural adjustment, the economy and industrialization, government and political behavior, marriage and the family, methodology, personality, population, regional organization and southern regional studies, small group behavior, social aspects of health and medical care, social theory, social welfare, and urbanization and city planning.

In cooperation with the Institute of Statistics, the Institute sponsors a Social Science Statistical Laboratory with Daniel O. Price as director, and George E. Nicholson, Jr., as associate director. With its services available to all social science faculty members, the laboratory (1) advises on all phases of quantitative methodology, using consultation from the staff of the Institute of Statistics; (2) provides editing, coding, and computing services; (3) serves in a liaison capacity with the sorting and tabulating units of the Institute of Statistics; (4) conducts research designed to develop and test new quantitative concepts and techniques.

The Central Office, in charge of the Assistant Director, coordinates secretarial and clerical services, personnel policies, fiscal operations, purchasing, travel arrangements, and editing and preparation of research manuscripts for publication.

The Institute is housed on the third and fourth floors of Alumni Building, in one room in New East Annex, and in two rooms in the main Library. Facilities for staff and graduate students include, in addition to the Central Office and individual offices, a statistical laboratory, a drafting room, the departmental Library of Sociology, Anthropology, Planning, and Social Work, and a large Laboratory-Workshop. This Laboratory-Workshop serves students and others as an exhibit hall, reference room library, and general workroom in southern regional development. Wall exhibits depict various phases of world, American, and southern regions, and community development. Materials are available for study and research. The room is equipped for the use of and experimentation with audio-visual aids.

Additional information and application blanks for appointment to research assistantships may be obtained by writing to the Director, Institute for Research in Social Science, The University of North Carolina, Chapel Hill, North Carolina.

THE INSTITUTE OF LATIN AMERICAN STUDIES

STURGIS E. LEAVITT, *Director; Kenan Professor of Spanish*
FEDERICO G. GIL, *Assistant Director; Associate Professor of Political Science*
MABEL BARRETT JONES, *Cataloguer of Latin American Materials*
DAVID G. BASILE, *Assistant Professor of Geography*
HAROLD A. BIERCK, *Associate Professor of Latin American History*
JOHN PHILIP GILLIN, *Professor of Anthropology and Research Professor in the Institute for Research in Social Science*
LOREN C. MACKINNEY, *Professor of History*
WILLIAM WHATLEY PIERSON, *Professor of History and Political Science and Dean of the Graduate School*

The Institute of Latin American Studies brings together the courses relating to Latin America offered in various departments of the University. It offers an undergraduate major, which is in effect also a major in one of the recognized departments. The Institute also offers programs in Latin American studies for the master's degree (see statement in the offerings of the Department of Political Science, p. 317).

The undergraduate program of courses is intended to provide a basis for graduate work in Spanish, history, or political science. It will be of significant value to students who wish to enter the Foreign Service of the United States or to engage in Latin American trade.

In the Latin American field the University of North Carolina has a rich collection of books, many of which were secured through grants from the Rockefeller Foundation and the Carnegie Corporation. A considerable amount of recording equipment has been secured for intensive language instruction in Spanish and Portuguese.

THE INSTITUTE OF STATISTICS

GORDON GRAY, A.B., LL.B., LL.D., *President of the University of North Carolina*
ROBERT BURTON HOUSE, A.M., LL.D., *Chancellor of the University of North Carolina at Chapel Hill*
CAREY HOYT BOSTIAN, Ph.D., *Chancellor of the North Carolina State College of Agriculture and Engineering*
EDWARD KIDDER GRAHAM, Ph.D., *Chancellor of the Woman's College*
GERTRUDE MARY COX, M.S., *Director*
HAROLD HOTELLING, Ph.D., *Associate Director*
DANIEL O'HAVER PRICE, Ph.D. (North Carolina), *Professor of Sociology, Chapel Hill, and Director, Social Science Statistical Laboratory*

Department of Statistics

Chapel Hill

GEORGE EDWARD NICHOLSON, JR., Ph.D., (North Carolina), *Associate Professor and Chairman of the Department*
RAJ CHANDRA BOSE, D.Litt. (Calcutta), *Professor*
HAROLD HOTELLING, Ph.D. (Princeton), *Professor*
SAMARENDRA NATH ROY, M.Sc. (Calcutta), *Professor*
WASSILY HOEFFDING, Ph.D. (Berlin), *Associate Professor*
WALTER LAWS SMITH, Ph.D. (Cambridge), *Assistant Professor*
JOHN T. CHU, Ph.D. (Iowa State), *Research Associate*
PAUL K. ITO, Ph.D. (St. Louis), *Research Associate*
DONALD L. BURKHOLDER, M.S. (Wisconsin), *Research Assistant*
ALFRED DESGLOUX, diplomé (Swiss Institute of Technology), *Research Assistant*
RAMANATHAN GNANADESIKAN, M.A. (Madras), *Research Assistant*
SHANTIS S. GUPTA, M.A. (Delhi), *Research Assistant*
MOHAMMED IQBAL, M.A. (Panjab), *Research Assistant*
JOHN H. MACKAY, M.A. (Iowa State), *Research Assistant*
SUJIT K. MITRA, M.Sc. (Calcutta), *Research Assistant*
DONALD F. MORRISON, A.M. (Boston), *Research Assistant*
K. V. RAMACHANDRAN, M.A. (Bombay), *Research Assistant*
ROBERTO SASSO, Licanciado (Costa Rica), *Research Assistant*
M. M. SIDDIQUI, M.A. (American), *Research Assistant*
JOHN W. WILKINSON, M.A. (Queen's University), *Research Assistant*
CLAUDE DE COURVAL, M.A. (Montreal), *Graduate Assistant*
DONALD L. RICHTER, A.B. (Bowdoin), *Graduate Fellow*

Department of Statistics

Raleigh

JACKSON ASHCRAFT RIGNEY, M.S. (Iowa State), *Professor and Head of the Department*
RICHARD LOREE ANDERSON, Ph.D. (Iowa State), *Professor*
RALPH ERNEST COMSTOCK, Ph.D. (Minnesota), *Professor*
GERTRUDE MARY COX, M.S. (Iowa State), *Professor*
HENRY LAURENCE LUCAS, JR., Ph.D. (Cornell), *Professor*
DAVID DICKENSON MASON, Ph.D. (North Carolina State), *Professor*
ROBERT JAMES MONROE, Ph.D. (North Carolina State), *Professor*
HAROLD FRANK ROBINSON, Ph.D. (Nebraska), *Professor*
HUGH FAIRFIELD SMITH, M.S. (Cornell), *Professor*

COLUMBUS CLARK COCKERHAM, Ph.D. (Iowa State), *Associate Professor*
ALVA LEROY FINKNER, Ph.D. (North Carolina State), *Associate Professor*
ROBERT JOHN HADER, Ph.D. (North Carolina State), *Associate Professor*
DANIEL GOODMAN HORVITZ, Ph.D. (Iowa State), *Associate Professor*
JACK FLEISCHER, M.S. (North Carolina State), *Assistant Professor*
WILLIAM WESLEY GARRY SMART, JR., Ph.D. (North Carolina State), *Assistant Professor*
FRANCES JOSEPH VERLINDEN, M.S. (North Carolina State), *Assistant Professor*
SARAH PORTER CARROLL, M.S. (North Carolina State), *Instructor*
ARNOLD HERBERT EDWARD GRANDAGE, Ph.D. (North Carolina State), *Associate Statistician*
ROGER GENE PETERSON, Ph.D. (North Carolina State), *Assistant Statistician*
JOSEPH F. SCHULER, Ph.D. (Iowa State), *Assistant Statistician*
CHARLES FOSTER FEDERSPIEL, M.A. (University of Michigan), *Graduate Assistant*
RUDOLF JAKOB FREUND, M.A. (Chicago), *Graduate Assistant*
DONALD ANDREW GARDINER, M.B.A. (University of Buffalo), *Graduate Assistant*
DAVID CHARLES HURST, B.S. (Montana State), *Graduate Assistant*
SARAH JENSEN, B.S. (Univ. of Alabama), *Graduate Assistant*
THERESE MARIE KELLEHER, M.S. (North Carolina State), *Graduate Assistant*
WILLIAM MENDENHALL, III, M.S. (Bucknell), *Graduate Fellow*
WILLIAM ROY MILLS, B.Sc. (London) A.R.C.S., *Graduate Assistant*
ROBERT JOHN MIRAVALLE, M.S. (Washington State), *Graduate Assistant*
ROBERT DEAN MORRISON, M.S. (Oklahoma A and M), *Graduate Assistant*
GILBERT IVAN PAUL, B.Sc. (University of Alberta), *Graduate Assistant*
EDWARD POLLAK, B.S. (Cornell), *Graduate Fellow*

Department of Biostatistics

BERNARD GEORGE GREENBERG, Ph.D. (North Carolina State), *Professor of Biostatistics in the Institute of Statistics and the School of Public Health, Chapel Hill*
HARRY SMITH, JR., Ph.D. (North Carolina State), *Assistant Professor of Biostatistics in the Institute of Statistics and the School of Public Health, Chapel Hill*

The Institute of Statistics is an agency of the University established in 1945 to stimulate and strengthen the University's program in statistics on all its campuses. The Institute under the direction of Gertrude M. Cox and associate director, Harold Hotelling, works through departments and agencies which exist under the regular administrations since it is an inter-campus activity. It plays a major role in assisting local administrations to create, maintain and strengthen departments, and administers grants and contracts which have had to do with statistical theory and practice. It brings distinguished scholars to the University from other centers throughout the world to do research, teaching and occasional lecturing and is instrumental in organizing summer sessions and conferences. It encourages various separate statistical groups to work together for mutual benefit in teaching and research.

The theory and technique for obtaining knowledge by the methods of deductive inference have been the source of fruitful study for several thousand years. On the other hand, the problem of obtaining

knowledge about the world in which we live by inferring general causal laws from specific observable events has received serious and concerted attention only within the present century. Research workers in all fields which demand interpretation of data began to develop methods and techniques to solve their problems. Gradually it became evident that a body of techniques and ideas stemming from a central intellectual problem was being pursued and developed in diverse fields, which demanded such techniques for progress in that special branch of known knowledge. Accordingly, some research workers began to study the problems independently of the particular application, and there developed from these researches a body of ideas which have resulted in profound and important practical and theoretical results. For example, the combinatorial mathematics needed for the design of a field trial for efficient discrimination among the yields of several varieties of cotton may also be applied in medical research and in the sampling of human populations to obtain, more quickly and cheaply than by a complete enumeration, information needed for proper government administration. The same statistical formulae have been used to infer prehistory from skull measurements and to distingush between plants of similar species.

These are problems of statistical method. They are parts of the general theory of statistics, which has in recent years taken on a coherent unity superseding the earlier heterogeneous ideas and formulae adapted to scattered specific needs. The theory of statistics, as now understood, includes not merely formulae and methods for combining observations and drawing inferences from them, but also the design of suitable experiments and projects for collecting data, so far as the same considerations apply to diverse fields of application. It uses a great deal of higher mathematics and rests essentially on the theory of probability. It also has relations with philosophy through the theory of inductive inference.

In Raleigh the Institute cooperates with the Department of Experimental Statistics which is organized in the School of Agriculture and which engages in much close consulting work with the Agricultural Experiment Station and Engineering School. Besides training graduate students, whose chief interest is in application of statistics to such areas, it engages in cooperative research activities with government agencies and with industry throughout the state. In addition to conducting a graduate training program and granting M.A. and Ph.D. degrees in Experimental Statistics, the department conducts the undergraduate teaching of statistics and offers a B.A. in statistics.

In Chapel Hill the Institute works with many groups. The Department of Statistics is organized within the Graduate School and is principally concerned with research in theoretical statistics and the

training of students for M.A. and Ph.D. degrees. The department has research projects sponsored by the Office of Naval Research, United States Air Force and other organizations such as the Ford Foundation in the area of probability and statistics, which provide opportunities for graduate students to conduct research leading to the Ph.D. degree and receive stipends for their graduate study.

The Department of Biostatistics in the School of Public Health, the Social Science Statistical Laboratory and the Psychometric Laboratory are other organizations in Chapel Hill, which, together with the Institute of Statistics, engage in cooperative research activities. Through the Institute of Statistics, contact between members of the various groups is maintained and encouraged.

PERSON HALL ART GALLERY

*JOHN VOLNEY ALLCOTT, *Director*
†KENNETH NESS, *Acting Director*
GEORGE KACHERGIS, *Education Director*
LYNETTE WARREN, *Curator*
‡ARCHIE DANIELS, *Assistant*

Person Hall was built in 1795 as the University chapel and finished in 1797 by gift of General Thomas Person. It was restored in 1937 by government agencies and through the efforts and gift of Mrs. Katharine Pendleton Arrington. It is open free daily with a program of exhibitions and gallery talks.

On permanent exhibition are a few works of art including the W. W. Fuller Collection of American and European Painting.

Exhibitions, September, 1953—September, 1954, were: Rental Collection of Reproductions; Cubism; Annual Exhibition from the Whitney Museum; Fifty Photographs by Albert Renger-Patzsch; Forty-Five Drawings from the Collection of the Museum of Modern Art; Rice Lebrun; Hale Woodruff; Europe: The New Generation; Carolina Dramatic Association's Festival Exhibition; 18th Annual School Exhibition, U.N.C.; Archie Daniels.

Person Hall Art Reference Library is housed in the gallery. The Library includes the Weil Collection of photographs of Italian Renaissance art, American prints from the Jacocks Collection, color reproductions of old and modern masters, and the Picture Rental Collection of framed color reproductions.

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* Absent on leave, spring semester, 1955.
† Spring, 1955.
‡ Retired July 1, 1954.

THE CAROLINA PLAYMAKERS

SAMUEL SELDEN, *Director*
HARRY E. DAVIS, *Associate Director*
JOHN W. PARKER, *Assistant Director and Business Manager*
IRENE SMART RAINS, *Costume Director*
JAMES M. RILEY, *Technical Director*
KAI JURGENSEN, THOMAS M. PATTERSON, FOSTER FITZ-SIMONS, *Assistant Directors*
JUNE M. ESCHWEILER, SUZANNE E. KRAMER, JOSEPH ROSENBERG, D. R. TREAT, MARJORIE E. WYLDE, *Assistants*

Regular work in dramatic art at the University of North Carolina was initiated by Dr. Frederick H. Koch in 1918. The same year he founded The Carolina Playmakers. The theatre building which is now their home was remodeled and dedicated to their use in 1925.

The Playmakers serve the purposes of both a laboratory organization and a community theatre. The faculty of the Department of Dramatic Art, assisted by students, is the working staff. The busy program of activities between September and June each year includes four major productions of old and modern dramas, classical and popular, and four experimental productions of new scripts, both one-act and full-length. Major productions and experimental productions are given during the summer session. The acting, scenery, lighting, costuming, stage-management, as well as much of the designing and directing for these plays, are done by students, principally those enrolled in the department. During the school year the Playmakers frequently tour one of their productions through towns in North Carolina and neighboring states, and each summer a large number of students take acting and staff engagements in off-campus productions, such as *The Lost Colony, Unto These Hills,* and *Horn in the West.*

Membership in the Playmakers is open to graduate and undergraduate students from all classes and divisions of the University and to citizens of the town and neighboring communities. Any person desiring membership can earn it simply by taking part, in any capacity, in the Playmakers' activities. Roles in the plays and positions on the production staffs are assigned through competition. Playmakers who complete a specified number of work units in at least two divisions of theatre activity are eligible to receive a mask (pin) award. Persons who do outstanding work, usually over a period of two or more years, are given a Special Award. The Roland Holt Silver Cup and the Joseph D. Feldman Award are presented to students for distinctive achievements in playwriting.

ESTABLISHED LECTURES

GEORGE ALEXANDER HEARD, *Chairman*

The John Calvin McNair Lectures

This lectureship was founded through a bequest by the Reverend John Calvin McNair of the Class of 1849. The series was inaugurated in 1908 by Francis H. Smith, the first in a line of eminent thinkers which has included Henry Van Dyke, Arthur Twining Hadley, John Dewey, Roscoe Pound, William Louis Poteat, Harris Elliott Kirk, Robert Andrews Millikan, George F. Thomas, Arthur H. Compton, Kirtley F. Mather, William Ernest Hocking, Edmund W. Sinnott, and Charles A. Coulson.

The plan and purpose of the lectures are stated in the will as follows: "They shall employ some able Scientific Gentleman to deliver before all the students then in attendance at said University a course of Lectures the object of which Lectures shall be to show the mutual bearing of Science and Theology upon each other and to prove the existence and attributes, as far as may be, of God from nature. The Lectures, which must be prepared by a member of some one of the Evangelic denominations of Christians, must be published within twelve months after delivery, in either pamphlet or book form."

The Weil Lectures

An unendowed lectureship on American citizenship was established by the University during the year 1914-1915. The families of Sol Weil and Henry Weil of Goldsboro later generously endowed the lectures as an annual series called the Weil Lectures on American Citizenship.

William Howard Taft delivered the first lectures. A group of distingushed world citizens has followed him, including William Bennett Munro, Edward A. Ross, William Allen White, Charles A. Beard, Harold J. Laski, Felix Frankfurter, and Henry Wallace. Among the more recent speakers have been T. V. Smith, Richard B. Tawney, Robert M. MacIver, Eleanor Roosevelt, Edwin G. Nourse, Robert A. Taft, Zechariah Chafee, Jr., and Galo Plaza.

THE UNIVERSITY LIBRARY

ANDREW HARLIS HORN, *Librarian*
OLAN VICTOR COOK, *Associate Librarian*

The Administrative Board

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ISAAC THOMAS LITTLETON, *Assistant to the Librarian*
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JAMES WELCH PATTON, *Southern Historical Collection*
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GENEVIEVE YOST SCHEER, *Serials Department*
ROBERT ELMER THOMASON, *Supervising Bibliographer*
MARY LINDSAY THORNTON, *North Carolina Collection*
LENA MAE WILLIAMS, *Order Department*
FRANCES LYDIA YOCOM, *Catalogue Department*

The University Library contains more than 663,000 volumes. Most of its holdings are housed in the Main Library building, which in 1952 provided doubly increased facilities for reading, study, and investigation, as well as book capacity and service activity. Approximately 30,000 titles are added annually by purchase, gift, and exchange. General reference and bibliographical resources are strengthened by 130,000 bound periodicals, over 4,500 current serials, as well as exceptional files and film reproductions of federal and state publications.

Special collections of importance include: The Southern Historical Collection of more than 2,500,000 manuscripts; the North Carolina Collection of 154,000 items relating to the state; the Hanes Collection recording the development of the book, including 633 Incunabula titles and over 1,200 manuscripts; the Whitaker Collections of Johnson, Dickens, and Cruikshank; the Jenkins Collection of public documents; the Nolen Collection of city and regional planning; the Archibald Henderson Collection of Materials Relating to George Bernard Shaw; the Augustus Thomas Collection of dramatic manuscripts; together with unusual collections of American drama, Spanish drama, Shakespeare, Raleigh, Wolfe, Folklore, Latin American studies, Southern literature, Romance languages, World Wars I and II, maps, prints,

graphic arts, and books by and about the Negro. The Library has extensive bibliographical resources, including several depository catalogues of other libraries. Frequent messenger service and other cooperative relationships with the libraries of Duke University, State College, and Woman's College make the holdings of these great collections exceptionally available. The Photoreproduction Laboratory furnished with new technical apparatus, including microfilming and photoprinting equipment, miraculously brings all other libraries near at hand.

Additional recent features are: the Rare Book Room, protecting and stimulating the use of the Library's treasures; the Current Affairs and Public Documents Reading Room, a bureau of information on current events and thought; the Sir Walter Raleigh Rooms furnished as in 1600; the Early Carolina Rooms equipped as in 1740; the Print and Map Rooms; the Assembly Room; the enlarged Bull's Head Bookshop where all may browse, borrow or buy the latest books; the expanded Library Extension Department with its state-wide lending services to all readers.

Other facilities for graduate study and research include special reading rooms, seminar and discussion rooms, 511 individual carrels located in the air-conditioned bookstack and thirty-four individual studies for writers, as well as the special collections serviced in the departmental libraries assigned to Art; Botany; Chemistry; Economics and Business Administration; Geology; Division of Health Affairs (Medicine, Public Health, Nursing, Dentistry, Pharmacy and the Hospital); Institute of Government; Law; Library Science; Mathematics and Physics; Music; Psychology; Sociology, Anthropology, and Planning; and Zoology.

THE UNIVERSITY NEWS BUREAU

ROBERT WILSON MADRY, A.B., B.Litt., *Director*
JAKE WADE, A.B., *Associate Director*
MRS. L. B. ELLER, JR., MISS DELL HOYLE, *Assistants*

The University News Bureau is the official news distributing agency of the University of North Carolina at Chapel Hill. It is responsible for the gathering and dissemination of town and campus news to the several press associations, to the newspapers in North Carolina and throughout the country, and to the radio and television stations.

The main offices of the News Bureau are in Bynum Hall. The sports division, with Jake Wade in charge, is in Woollen Gymnasium.

In the fall of 1918 the News Bureau was established with a full-time director for the first time in the history of the University. Prior

to that, news stories from Chapel Hill were sent out by the professor of journalism and student correspondents.

Robert W. Madry was the first director of the University News Bureau which, when established, consisted of a desk and typewriter in Business Manager Charles T. Woollen's office in the Alumni Building.

Mr. Madry resigned a year later to enter the Columbia University School of Journalism. After doing newspaper work in Paris and New York, following graduation from Columbia, he returned in 1923 to become director of the News Bureau for the second time and has been in charge since then. Lenoir Chambers, now editor of the *Norfolk Virginian-Pilot,* was director of the News Bureau from 1919 to 1921, and Louis Graves, now contributing editor of the *Chapel Hill Weekly,* was director and professor of journalism from 1921 to 1923.

It has always been the policy of the News Bureau to send out all significant and worthwhile news about the University, whether favorable or unfavorable. The University Administration has never imposed censorship on news from Chapel Hill. This means that the operations of the University have been an open book. The result is that the people of the state are confident that they will be informed of the day-by-day activities of their University.

THE UNIVERSITY OF NORTH CAROLINA PRESS

LAMBERT DAVIS, *Director*
PORTER COWLES, *Assistant Director*

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CHARLES BASKERVILL ROBSON
CORYDON PERRY SPRUILL
RUPERT BAYLESS VANCE
LOUIS ROUND WILSON

The University of North Carolina Press was incorporated on June 12, 1922. The objects for which it was established are (1) to publish periodicals devoted to the advancement of learning and produced at the University by or under the direction of the faculty; (2) to publish catalogues, bulletins, and other documents pertaining to the University and its various schools and departments; and (3) to pro-

* Absent on leave, 1954-1955.

mote generally, by publishing deserving works, the advancement of the arts and sciences and the development of literature.

The Press was established under the authority of the Board of Trustees of the University. It is a non-stock corporation, organized under the laws of North Carolina, whose policies are determined by a Board of Governors appointed by the Board of Trustees and acting under the authority of the Chancellor and the President.

The Press has published approximately twenty books per annum during recent years. The Press also publishes the following periodicals: *The Journal of the Elisha Mitchell Scientific Society; Studies in Philology; The High School Journal; Social Forces; The North Carolina Law Review; The University of North Carolina Extension Bulletin; The Library Extension Publication; The University of North Carolina News Letter; The University of North Carolina Record;* and the following departmental series: *The James Sprunt Studies in History and Political Science; Studies in Romance Languages and Literature; Studies in Germanic Languages and Literature; Studies in Comparative Literature;* and *Studies in Business Administration.*

The Press offices are located in Bynum Hall. The following agents represent the Press outside the United States: W. S. Hall and Company, Continental Europe; Oxford University Press, books in the British Isles, India, and Pakistan; Cambridge University Press, periodicals in the British Isles; Henry M. Snyder and Company, worldwide representative, except in territories otherwise served; the Ryerson Press, Canada.

A complete list of publications issued by the Press, and seasonal catalogues of new publications, will be supplied without charge to any address on request.

THE INSTITUTE OF FISHERIES RESEARCH

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WILLIAM ANDREW ELLISON, JR., M.A., *Director*

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ROBERT LUNZ, *Bears Bluff Laboratories*
THURLOW NELSON, *Rutgers University*
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WILLIAM EARL FAHY, Ph.D., *Biologist, Oyster Investigations and Assistant Professor*
AUSTIN BEATTY WILLIAMS, Ph.D., *Biologist, Shrimp Investigations and Assistant Professor*
HARDEN FRANKLIN TAYLOR, A.B., Sc.D., *Consultant*

The Institute of Fisheries Research was established by action of the Board of Trustees September 29, 1947. The function of the Institute is to make practical application of biology and other sciences, including economics and marketing, to the problems of the fisheries of North Carolina. It endeavors through scientific research to arrive at a better practical understanding of the conditions that impede development of the state's marine fisheries and of the principles that should govern the application of measures of conservation. The establishment of the Institute rests, then, on the belief that not only those engaged in fisheries and related industries but also the state as a whole will profit from the applications of science and economics to the problems of the fisheries and other marine resources.

It is believed that proper rules of conservation of fisheries resources are not best arrived at by mere hit-or-miss methods or by the sincerest effort to satisfy now one and now another group having special interests and necessarily limited knowledge. There is needed, as seems generally recognized, more basic knowledge concerning our resources. Facts are wanted, rather than casual theories, as to what actually governs the abundance of fishes and shellfishes, which show continual changes with decrease and increase of numbers. Understanding is wanted concerning what directs the movements of particular groups of fishes, so that desirable or undesirable kinds are here or there, from season to season and from year to year, in unpredictable fashions. This, in turn, means that more should be known about the underlying physical, chemical, and biological conditions and their changes, reflected in fluctuations of basic food supplies, salinities, temperatures, currents, stream discharge, and oceanic circulation. It is assumed also that properly conducted scientific and economic studies may be helpful in promoting efficient and more profitable practices in exploitation, processing, and marketing of fishery products.

* Resigned December 23, 1954.
† Appointed December 23, 1954.

The interest of the University and the state in applications of marine biology and in fisheries began more than half a century ago with the establishment by the University of a summer laboratory at Beaufort through the Department of Biology and with active cooperation from the State Geological and Economic Survey, partial predecessors of the present Department of Conservation and Development. This laboratory developed into the Fisheries Biological Laboratory operated by the federal government. Despite its services and potential usefulness, experience has proven that this laboratory cannot meet the full practical needs of the state.

In 1947, the University again interested itself in the problems of the fisheries. With the effective cooperation of the Department of Conservation and Development and its Division of Commercial Fisheries, it has established a laboratory for fisheries research at a favorable location near Morehead City. Its inauguration was made possible by a four-year grant from the Knapp Foundation, Inc., of New York, conditioned on matching contributions from the state. The grant from the Knapp Foundation was "A tribute to Joseph P. Knapp's lifelong interest in the betterment of mankind." The matching on the part of the state for the first biennium was accomplished by giving the Institute direction of an appropriation made by the legislature of 1947 for a survey of off-shore shrimping grounds and a part of the appropriation from the same legislature for the rehabilitation of the oyster and other shellfish. The cooperation of the Commission for the Survey of Shrimping Grounds and of those concerned with the oyster industry made this possible. The legislature of 1949 made an appropriation through the Department of Conservation and Development, to match the grant to the University from the Knapp Foundation for the biennium 1949-1951. Since 1951 the legislature has made appropriations directly to the University for the operation of the Institute.

Meantime, with financial aid from an alumnus, Mr. George Lurcy of New York, matched by a grant from the General Education Board, there had been undertaken a Survey of Marine Fisheries of North Carolina. The report of the Survey was published in February, 1951.

The Institute will contribute to the educational program of the University by offering practical training and guidance for graduate students.

Courses in hydrobiology and fishery science are described in Part IV of this catalogue under Department of Zoology (page 336).

RESEARCH LABORATORIES OF ANTHROPOLOGY

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The Research Laboratories of Anthropology were established October 7, 1939, for the purpose of sponsoring archaeological and ethnological studies in North Carolina and the Southern states. In addition to its own research program, it serves to coordinate these activities among other organizations and functions as a central repository and research center for cooperating agencies. Its present collection of basic data exceeds 1,000,000 items and is considered to be one of the primary sources for archaeological research in the South. The central office of the Laboratories is situated in Alumni Building with processing laboratories and storage files being housed in Venable Hall.

THE MOREHEAD PLANETARIUM

Gift of John Motley Morehead (Class of 1891), the Morehead Building contains the Memorial Rotunda, Faculty Lounge, University Room, and a dining room for official functions of the University. Among the paintings from the Morehead collection permanently hung in the Rotunda are Rembrandt's portrait of his sister and many other valuable works of famous artists. Two large galleries flanking the Rotunda provide space for temporary exhibitions.

The scientific portion of the building contains the sixth Zeiss Planetarium installation in the Western Hemisphere, the first one in the world to be owned and operated by a university. A realistic reproduction of the sky of thousands of years past or hence as seen from any position on earth is produced on the sixty-eight-foot perforated stainless steel dome of the chamber which seats 490 visitors in concentric circular rows. Spectacular productions given since opening on May 10, 1949, have included "Star of Bethlehem," "By Rocket To Mars," "Birth and Death of the Earth," "Easter, the Awakening," and many others. Public demonstrations are given every evening in the week at 8:30; on Saturdays at 11:00 and 3:00; Sundays at 3:00 and 4:00. Special presentations for school children are given on Wednes-

days and Thursdays at 11:00 A.M. and 2:00 P.M. A new program is given each four or five weeks. The Planetarium is used also for University classes in astronomy and navigation.

Associated with the Planetarium are two large scientific exhibit rooms and one of only two sixty-five foot orreries of the solar system in the world. In the first five years of operation, half a million visitors attended the Planetarium presentations.

THE DEVELOPMENT COUNCIL

The Development Council was organized in June, 1952. It is made up of a volunteer group of distinguished business and professional leaders of the state who are cooperating with the administration, trustees, faculty, alumni, and friends in planning and carrying out a continuous development program to serve the University and the state. Among its other duties, the Council is vitally interested in the coordination of the efforts of the foundations listed below. Charles M. Shaffer, Chapel Hill, North Carolina, is director.

FOUNDATIONS

Alumni Annual Giving

Annual Giving was organized in September, 1952, to give every alumnus the opportunity of annually assisting the University by contributing to an unrestricted fund. Inquiries should be sent to the director, Tom Bost, Jr., Alumni Annual Giving, Chapel Hill, North Carolina.

The Business Foundation of North Carolina, Inc.

The Business Foundation was established in July, 1946. Its articles of incorporation provided: "The objects and purposes for which the corporation is formed are to aid and promote, by financial assistance and otherwise, all types of education, service and research for business and industry at or through the School of Commerce and other departments of the University of North Carolina. . . ." Inquiries should be directed to The Dean of the School of Business Administration, Chapel Hill, North Carolina.

The Dental Foundation of North Carolina, Inc.

The Dental Foundation, incorporated under the laws of North Carolina in 1950, is dedicated to the achievement of optimum dental

and general health for all the citizens of North Carolina. It is designed specifically to aid educational and research programs, including student loans, scholarships, and the library, of the School of Dentistry of the University of North Carolina. Inquiries should be directed to the secretary-treasurer, Dean John C. Brauer, School of Dentistry, Chapel Hill, North Carolina.

The Educational Foundation, Inc.

The Educational Foundation was organized in 1939 "to provide grants-in-aid to worthy and needy students participating in athletics." All grants-in-aid are awarded through the University Scholarship Committee. Inquiries should be directed to the executive secretary, George P. Hogan, Chapel Hill, North Carolina.

The Friends of the Library

The Friends of the Library was organized in 1932 "to promote the interests of the Library of the University of North Carolina at Chapel Hill, including the libraries of its schools and departments, by every means at the command of the organization or of its individual members." Inquiries should be directed to the chairman, Dr. L. R. Wilson, University Library, Chapel Hill, North Carolina.

The School of Journalism Foundation of North Carolina, Inc.

The Journalism Foundation was chartered in 1949 "to sponsor, promote, . . . the advancement of education in the field of journalism at or through the School of Journalism of the University of North Carolina at Chapel Hill. . . ." Inquiries should be directed to Dean Norval Neil Luxon, School of Journalism, Chapel Hill, North Carolina.

Law Alumni Association of the University of North Carolina, Inc.

The Law Alumni Association of the University of North Carolina, Inc., was incorporated in 1952. Its broad purposes are: "To sustain among the alumni high, ethical principles in the practice of law and otherwise to benefit the profession; to encourage the continuing development of legal education; to provide for scholarships and other aid to students; to provide prizes for excellence in student endeavors and recognition for alumni for outstanding achievements." Inquiries should be directed to the secretary-treasurer, William B. Aycock, School of Law, Chapel Hill, North Carolina.

The Medical Foundation of North Carolina, Inc.

The Medical Foundation, incorporated in 1949, has as its over-all objective that of aiding in medical education, medical research, and medical services to the people of North Carolina through the facilities of the University of North Carolina at Chapel Hill, and specifically through its School of Medicine and the adjunct teaching hospital. Inquiries should be directed to Dean W. R. Berryhill, School of Medicine, Chapel Hill, North Carolina.

The North Carolina Pharmaceutical Research Foundation, Inc.

The North Carolina Pharmaceutical Research Foundation, Inc., was organized in 1946 "to foster and promote . . . education and research in the School of Pharmacy of the University of North Carolina and in the State. . . ." Business is transacted chiefly through the office of the secretary, Dean E. A. Brecht, School of Pharmacy, Drawer 629, Chapel Hill, North Carolina.

Part Six

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DEGREES CONFERRED AUGUST 24, 1953

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Thesis: A Statistical Analysis of Star Clustering in Nuclear Emulsions.

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Thesis: A Study of the Isotope Effect of Carbon-14 in Several Applications of the Schmidt Reaction.

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William Charles Nungesser, *Physiology*
Thesis: The Action of Veratrum on the Circulation of the Dog With Special Reference to the Effects on the Kidney.

Walter Edward Organist, *Psychology*
Thesis: The Interrelationship of Degree of Original and Interpolated Learning in Retroactive Inhibition as Measured by a Recognition Method.

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Thesis: On the Distribution of Quadratic Forms.

George Steven Parthemos, *Political Science*
Thesis: Greek Theories of Property and Some of Their Repercussions.

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Thesis: Baudelaire and Religion.

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Thesis: Development of the Textile Industry in Alamance County, North Carolina.

John Morris Ryan, *Economics*
Thesis: The Use of Regional Interindustry Analysis in Employment Estimation.

Merton Eugene Simons, *Geology*
Thesis: Insoluble Residues of the Devonian Traverse Group, Michigan.

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Mary Katherine Sweeney, *English*
Thesis: The Value and Function of Memory in Wordsworth's Poetry.

James David Thompson, *Sociology and Anthropology*
Thesis: Structures of Authority and Power in Two Military Organizations.

Inez Greene Travis, *Physiology*
Thesis: The Absorption, Distribution, Metabolic Alteration and Excretion of Inorganic Nitrate in the Dog (With Observations on the Control of Electrolyte Excretion).

Robert Gaige Van Nostrand, *Physics*
Thesis: The Theory of Direct Current Prospecting in the Presence of Curved Boundary Surfaces.

Kenneth Cameron Wagner, *Sociology and Anthropology*
Thesis: Some Latent Functions of an Executive Control Device: A Sociological Analysis of a Social System Under Stress.

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Thesis: Lord Byron's Use and Conceptions of History.

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Thesis: Part I. The Attempted Synthesis of 6-Methoxy-1, 2, 3, 4-tetrahydrodibenzofuranone-1 and Its Relation to the Morphine Ring Structure.
Part II. The Synthesis of Some 2-Guanidobenzthiazoles.

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Thesis: An Analysis of Some Empirical Generalizations in Race Relations.

Ralph Henry Boatman, Jr., *Public Health*
Thesis: The Development of a Schedule for Describing the Division of Health Education of a State Health Department.

Frank Otto Bowman, Jr., *Geology and Geography*
Thesis: The Carolina Slate Belt Near Albemarle, North Carolina.

Wallace Reid Brandon, *German*
Thesis: Heinse as an Interpreter of Italy.

Francis John Brooke, III, *German*
Thesis: The Male-Female Relationships in the Dramas and *Novellen* of Heinrich Von Kleist.

Lucy Scott Bynum, *English*
Thesis: The Economic and Political Ideas of Augustus Thomas.

Charles Haywood Campbell, *Parasitology*
Thesis: The Antigenic Role of the Excretions and Secretions of *Trichinella spiralis* in the Production of Immunity in Mice.

Harold Thomas Conner, *Education*
Thesis: An Investigation of Certain Factors for the Selection and Guidance of Prospective Students Entering a School of Public Health.

Alex Corriere, *Romance Languages*
Thesis: French Tragedy, 1800-1850.

James Earl Danieley, *Chemistry*
Thesis: Studies in the Cyclobutane Series.

Louis Edgar Dollarhide, *English*
Thesis: Shakespeare's *Richard III* and Renaissance Rhetoric.

Herbert Wolfgang Eber, *Psychology*
Thesis: The Dimensionality of Discrepancies Between Responses to Paired Direct and Projective Questionnaires.

John Edward Farrior, *English*
Thesis: A Study of the *North American Review:* The First Twenty Years.

Edwin Octavious Gooch, *Geology*
Thesis: Infolded Metasediments Near the Axial Zone of the Catoctin Mountain-Blue Ridge Anticlinorium.

Augustus Washington Graham, III, *Chemistry*
Thesis: Rayleigh Light Scattering of Cationic Polymers in Aqueous Solutions of Hafnium (IV) Chlorides.

Edward Buck Hamer, Jr., *Romance Languages*
Thesis: Mythological Themes from Sophocles' Tragedies in Contemporary French Drama.

William Frank Heald, *Comparative Literature*
Thesis: A Comparison of the Plot Patterns in the Plays of Shakespeare and Lope De Vega.

Paul Stanley Herwitz, *Mathematics*
Thesis: On the Approximate Solutions of Differential Equations by Difference Equations.

Thad Wise Hollingsworth, *Education*
Thesis: Changing Concepts in Educational Psychology as Derived from Representative Textbooks (1911-1951).

Aubrey Mays Keesee, *Education*
Thesis: Fifty Years of Pupil Transportation in Virginia.

Ione Kemp Knight, *English*
Thesis: *Redde Rationem Villicationis Tue:* A Middle English Sermon of the Fourteenth Century.

William Frederick LaForge, *History*
Thesis: The Financial Reconstruction of Austria by the League of Nations.

Hazel M. Lambert, *Education*
Thesis: Present Theory and Practice in the Kindergarten with Implications for an Improved Program of Education for Four and Five-Year-Olds.

John Crawford Lindsay, *Physics*
Thesis: Electronic Analysis of High Speed Impacts.

Louis Floyd McAuley, *Mathematics*
Thesis: On the Aposyndetic Decomposition of Continua.

Arnold Lawrence McPeters, *Chemistry*
Thesis: The Carbon-14 Isotope Effect in the Condensation of Acetone-1-C14 with Anisaldehyde and in the Decarboxylation of Certain Benzylidene-Malonic Acids.

John Ward McKenzie, *Zoology*
Thesis: Some Effects of Radiophosphoros (p32) on Mitosis in Several Organs Larval *Amblystoma punctatum.*

William Wesley Main, *English*
Thesis: The Dramatic Context of Shakespeare's *Troilus and Cressida.*

William Connie Mathis, Jr., *Chemistry*
Thesis: The Carbon-14 Isotope Effect in the Pinacol-Pinacolone Rearrangement and the Hydrolytic Cleavage of Acetylacetone.

William Lawrence Mauldin, *Chemistry*
Thesis: A Study of the Synthesis, Solubility and Surface Activity of Certain Sodium 1-Alkoxy-4-Naphthalenesulfonates and Sodium 1-Alkoxy-5-Naphthalenesulfonates.

Richard McMath Mears, *English*
Thesis: Serious Verse Drama in England, 1812-1850.

Jule Alfred Medwin, *Education*
Thesis: A Study of Varsity Letter-Winners Who Graduated from the University of North Carolina from 1935 Through 1951.

Edwin Arthur Miles, *History*
Thesis: Jacksonian Democracy in Mississippi.

John Aiken Moore, *Romance Languages*
Thesis: *The Imitation of Christ* and Fray Luis De Granada, A Broadening of Perspective.

Thomas Bryan Moore, *Biological Chemistry and Nutrition*
Thesis: I. An Investigation of the Adult Rat's Requirement for Dietary Histidine. II. The Metabolism of Glutamic Acid-1-Carbon-14.

John Joel Moss, *Sociology*
Thesis: Newcomer Family-Community Relationships in Two Rapidly Urbanizing Communities: A Study in Family Acceptance-Rejection.

James Milton Parrish, *Economics*
Thesis: The Treatment of Monopoly by the Writers of the Classical School.

Aubrey Hampton Payne, *Mathematics*
Thesis: Some Polynomials Associated with Tschebycheff Polynomials.

John Russell Peck, *Education*
Thesis: A Survey of Provisions for Mentally Handicapped Children in the Public Schools of North Carolina in 1953-54.

Jester LeRoy Pierce, *Education*
Thesis: A History of the Southern Conference.

Elmer Lee Puryear, *History*
Thesis: Democratic Party Dissension in North Carolina, 1928-1936.

Marion Claude Riser, Jr., *Education*
Thesis: A Study of Health Programs in Selected Colleges and Universities in the South.

Walter Keith Roberts, *History*
Thesis: The Political Career of Charles L. McNary, 1924-1944.

James Kinlaw Rosser, *Chemistry*
Thesis: Syntheses of Some Substituted 3,5-Thiamorpholinediones.

Ben Moore Seelbinder, *Mathematics*
Thesis: Some New Results on Positive Solutions of Linear Diophantine Equations.

James Mahan Tanner, *Psychology*
Thesis: Psychogrammatic Indicants of Personality.

Pedro Nicholas Trakas, *Romance Languages*
Thesis: The Life and Works of Alfonso Herández-Catá.

Henry Willis Traub, *Classics*
Thesis: Death and Fame in Silver Latin Literature.

Harold Porter Van Cott, *Psychology*
Thesis: The Effects of Information on Response Acquisition and Extinction Under Conditions of Partial Reinforcement.

Frank Gerald Verdicchio, *Psychology*
Thesis: Development of a Method for Measuring Personality Integration.

Paul Thomas Von Bramer, *Chemistry*
Thesis: The Synthesis of Some New Difluoroquinolines and Related Compounds.

Rollin Herbert Wallick, *Chemistry*
Thesis: Ultraviolet and Infrared Spectrophotometric Studies of Substituted Quinolines.

Carl Michael White, *Economics*
Thesis: Some Economic Criteria of the Public Interest in Patent Policy.

Robert Earl Wolverton, *Classics*
Thesis: *Laudatores Temporis Acti:* Knowledge of the Roman Republic as Found in the Silver Age Authors of the First Century A.D.

Claude Lee Yarbro, Jr., *Biological Chemistry*
Thesis: Investigation of the Metabolic Role of Acetal Phosphatide.

HONORARY DEGREES

DOCTOR OF LAWS

William Henry Hoyt
Robert Obediah Huffman
William Picard Jacocks
Arthur Cleveland Nash
*William Bradley Umstead
Charles Scott Venable

* Died November 7, 1954.

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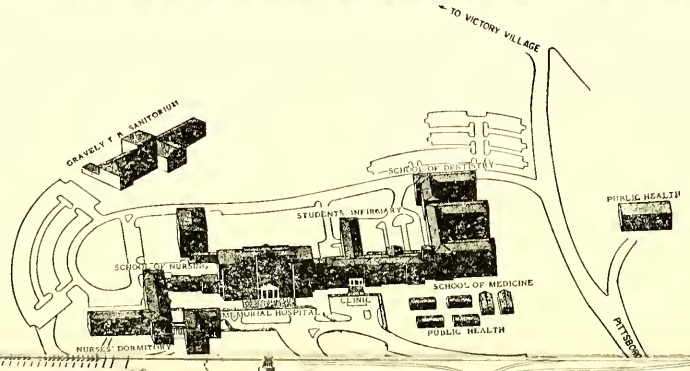
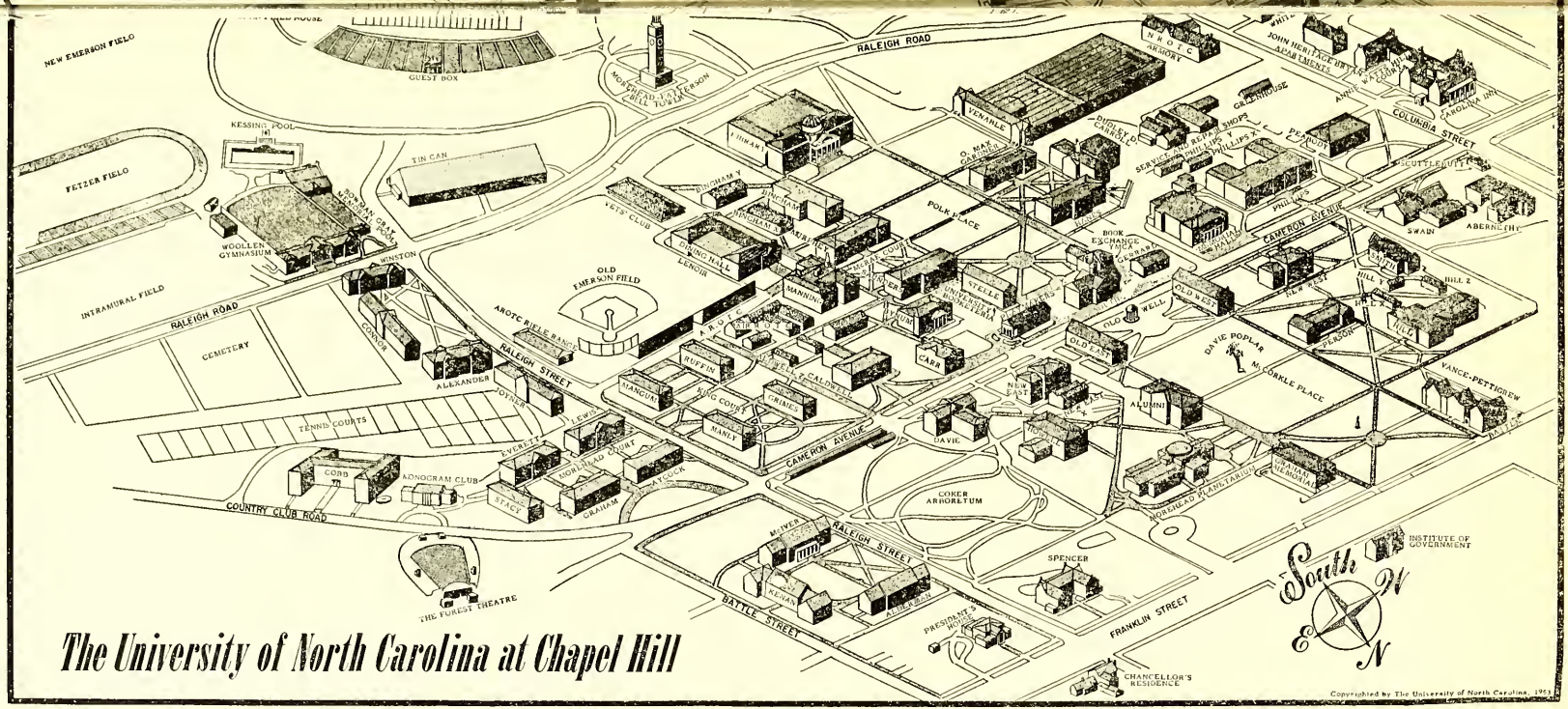
Campus Map—Map of the campus of the University of North Carolina at Chapel Hill showing at the bottom the main campus and at the top the Health Center, including, the Gravely Sanitorium, the Memorial Hospital, and the schools of Medicine, Nursing, Dentistry, and Public Health. This map was designed and executed by the Office of the University Engineer.





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